SONY

4-122-237-**11**(1)

DVD Home Theatre System

Operating Instructions

DAV-JZ8888K

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WARNING

Caution – The use of optical instruments with this product will increase eye hazard.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc. Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

Excessive sound pressure from earphones and headphones can cause hearing loss.

Indoor use only.

This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

Precautions

On power sources

- The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.
- As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

About These Operating Instructions

- The instructions in these Operating Instructions describe the controls on the remote. You can also use the controls on the unit if they have the same or similar names as those on the remote.
- The Control Menu items may vary depending on the area.
- "DVD" may be used as a general term for a DVD VIDEO, DVD+RW/DVD+R, and DVD-RW/DVD-R.
- Measurements are expressed in feet (ft) for North American models.
- The default setting is underlined.

Copyrights

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This system incorporates with Dolby* Digital and Dolby Pro Logic (II) adaptive matrix surround decoder and the DTS** Digital Surround System.

* Manufactured under license from Dolby Laboratories.
Dolby, Pro Logic, and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS and DTS Digital Surround are registered trademarks and the DTS logos and Symbol are trademarks of DTS, Inc. © 1996-2008 DTS, Inc. All Rights Reserved.

This system incorporates High-Definition Multimedia Interface (HDMI™) technology. HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.

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MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

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Playable Discs

Type	Disc logo	Characteristics	Icon
DVD VIDEO		• DVD VIDEO • DVD-R/DVD-RW in DVD VIDEO format or video mode • DVD+R/DVD+RW in DVD VIDEO format	DVD-V
VR (Video Recording) mode		• DVD-R/DVD-RW in VR (Video Recording) mode (except for DVD-R DL)	DVD-VR
VIDEO CD		• VIDEO CD (Ver. 1.1 and 2.0 discs) • Super VCD • CD-R/CD-RW/CD-ROM in video CD format or Super VCD format	VIDEO CD
Super Audio CD		• Super Audio CD	SuperAudioCD
CD		• Audio CD • CD-R/CD-RW in audio CD format	CD
DATA CD	–	• CD-R/CD-RW/CD-ROM in DATA CD format, containing MP3 files[1)], JPEG image files[2)], DivX video files, and MPEG4 video files, and conforming to ISO 9660[3)] Level 1/Level 2, or Joliet (extended format)	DATA-CD
DATA DVD	–	• DVD-ROM/DVD-R/DVD-RW/ DVD+R/DVD+RW in DATA DVD format, containing MP3 files[1)], JPEG image files[2)], DivX video files, and MPEG4 video files, and conforming to UDF (Universal Disk Format)	DATA DVD

[1)]MP3 (MPEG1 Audio Layer 3) is a standard format defined by ISO/MPEG for compresses audio data. MP3 files must be in MPEG1 Audio Layer 3 format.

[2)]JPEG image files must conform to the DCF image file format. (DCF "Design rule for Camera File system": Image standards for digital cameras regulated by Japan Electronics and Information Technology Industries Association (JEITA).)

[3)]A logical format of files and folders on CD-ROMs, defined by ISO (International Organization for Standardization).

Notes on discs

This product is designed to playback discs that conform to the Compact Disc (CD) standard. DualDiscs and some of the music discs encoded with copyright protection technologies do not conform to the Compact Disc (CD) standard, therefore, these discs may not be playable by this product.

Example of discs that the system cannot play

The system cannot play the following discs:

- CD-ROM/CD-R/CD-RW other than those recorded in the formats listed on page 5
- CD-ROM recorded in PHOTO CD format
- Data part of CD-Extra
- CD Graphics disc
- DVD Audio
- DATA CD/DATA DVD that does not contain MP3 files, JPEG image files, DivX video files, or MPEG4 video files
- DVD-RAM
- Blu-ray Disc

Also, the system cannot play the following discs:

- A DVD VIDEO with a different region code (page 7)
- A disc that has a non-standard shape (e.g., card, heart)
- A disc with paper or stickers on it
- A disc that has the adhesive of cellophane tape or a sticker still left on it

Note about CD-R/CD-RW/DVD-R/DVD-RW/DVD+R/DVD+RW

In some cases, CD-R/CD-RW/DVD-R/DVD-RW/DVD+R/DVD+RW cannot be played on this system due to the recording quality or physical condition of the disc, or the characteristics of the recording device and authoring software.
The disc will not play if it has not been correctly finalized. For more information, refer to the operating instructions for the recording device.
Note that some playback functions may not work with some DVD+RWs/DVD+Rs, even if they have been correctly finalized. In this case, view the disc by normal playback. Also some DATA CDs/DATA DVDs created in Packet Write format cannot be played.

About Multi Session CD

- This system can play a Multi Session CD when an MP3 file is contained in the first session. Any subsequent MP3 files recorded in later sessions can also be played back.
- This system can play a Multi Session CD when a JPEG image file is contained in the first session. Any subsequent JPEG image files recorded in later sessions can also be played back.
- If MP3 files and JPEG image files in music CD format or video CD format are recorded in the first session, only the first session will be played back.

Region code

Your system has a region code printed on the rear of the unit and will only play a DVD labeled with the same region code.

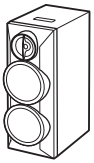
A DVD VIDEO labeled will also play on this system.
If you try to play any other DVD VIDEO, the message [Playback prohibited by area limitations.] will appear on the TV screen. Depending on the DVD VIDEO, no region code indication may be given even though playing the DVD VIDEO is prohibited by area restrictions.

Note about playback operations of a DVD or VIDEO CD

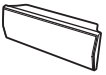
Some playback operations on a DVD or VIDEO CD may be intentionally set by software producers. Since this system will play a DVD or VIDEO CD according to the disc contents the software producers designed, some playback features may not be available. Be sure to read the operating instructions supplied with the DVD or VIDEO CD.

Unpacking

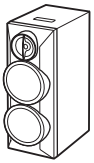
- Front speakers (4)



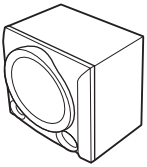
- Center speaker (1)



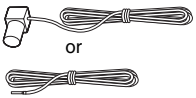
- Surround speakers (2)



- Subwoofers (2)



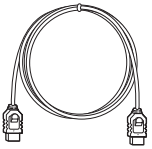
- FM wire antenna (aerial) (1)



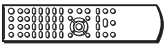
- Speaker cords (7, red/white/green/gray/blue/purple/brown)

- Video cord (1)

- HDMI cable (1)



- Remote commander (remote) (1)

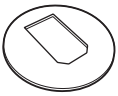


- R6 (size AA) batteries (2)

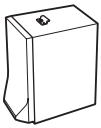
- Calibration mic (1)

- Foot pads (2 sets)

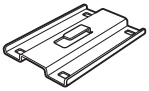
- Bases (2)



- Stands (2)



- Brackets (large) (6)



- Brackets (small) (4)

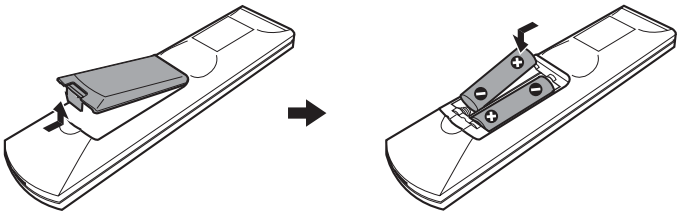
- Screws (black) (28)

- Screws (silver) (8)

- Operating Instructions
- Quick Setup Guide
- Speaker Installation Guide

Inserting batteries into the remote

Insert two R6 (size AA) batteries (supplied) by matching the ⊕ and ⊖ ends on the batteries to the markings inside the compartment. To use the remote, point it at the remote sensor ▣ on the unit.



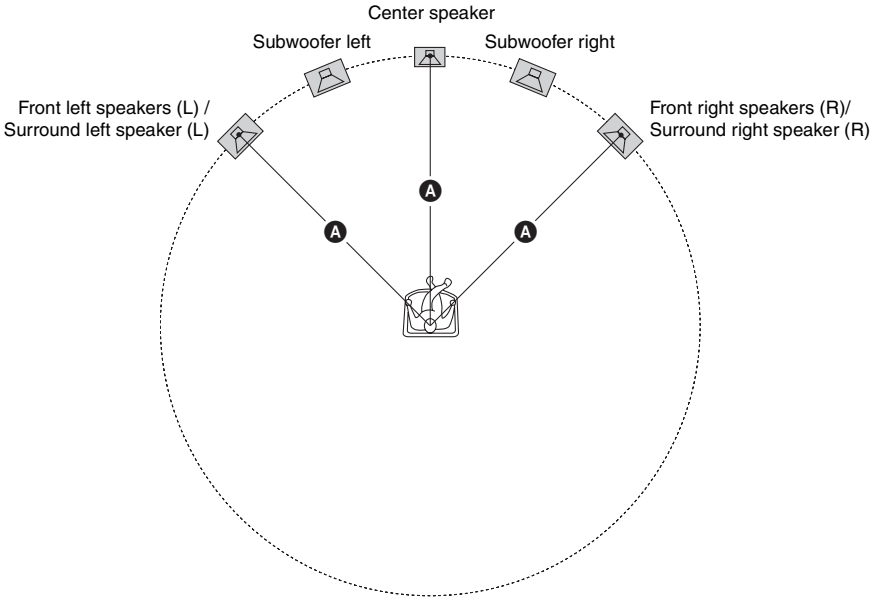
Note

- Do not leave the remote in an extremely hot or humid place.
- Do not use a new battery with an old one.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatus. Doing so may cause a malfunction.
- If you do not intend to use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Step 1: Installing the System

Positioning the system

For the best possible surround sound, place all speakers at the same distance from the listening position (Ⓐ). The distance can be between 0.0 to 7.0 meters.
If you cannot place the center speaker and surround speakers at the same distance as (Ⓐ), place them within 7.0 meters of the listening position.
The subwoofers can be placed anywhere in the room.
Since the system is equipped with S-Force PRO Front Surround technology (page 104), you can enjoy surround sound with the speakers in front of the listening position.



Note

- Be sure to connect the two front speakers.
- Install the speakers as in the illustration above. Otherwise, you will not achieve proper surround sound.
- Use caution when placing the speakers and/or speaker stands attached to the speakers on a specially treated (waxed, oiled, polished, etc.) floor, as staining or discoloration may result.
- Do not lean or hang on a speaker, as it may fall down.

Tip

- Since the system is equipped with S-Force PRO Front Surround technology (page 104), you can enjoy surround sound with the speaker positions illustrated above.
  To obtain the S-Force PRO Front Surround, do all the following:
  – set [ALL FRONT] or [ALL FRONT - NO CENTER] in the [SPEAKER FORMATION] setting (page 75).
  – set the decoding mode to “A.F.D. MULTI” (page 26).

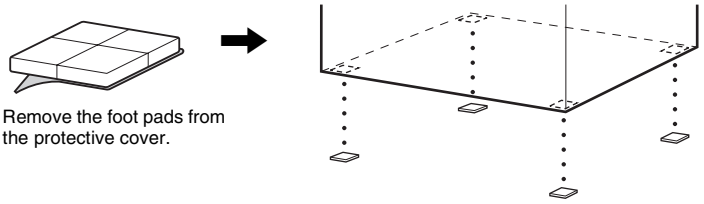
– play a multi channel source.
– set the sound mode (page 83) to “AUTO,” “MOVIE,” “MUSIC,” or “NEWS.”

To stack the front and surround speakers

You can stack the front and surround speakers by attaching the stand. For assembly, see “Speaker Installation Guide” (supplied).

Attaching the foot pads to the subwoofers

Attach the foot pads (supplied) to the bottom of the subwoofers to stabilize the subwoofers and prevent it from slipping.



Remove the foot pads from the protective cover.

To install the center speaker on a wall

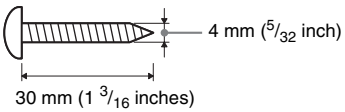
Caution

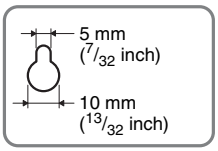
- Contact a screw shop or installer for information regarding the wall material or screws to be used.
- Use screws that are suitable for the wall material and strength. As a plaster board wall is especially fragile, attach the screws securely to a beam. Install the center speaker on a vertical and flat wall where reinforcement is applied.
- Sony is not responsible for accidents or damage caused by improper installation, insufficient wall strength or improper screw installation, natural calamity, etc.

Before installing the center speaker on a wall, connect the speaker cord to the speaker.
Be sure to match the speaker cord to the appropriate terminals on the speakers: the speaker cord with the color tube to ⊕, and the speaker cord without the color tube to ⊖.

Color tube
Center speaker: Green

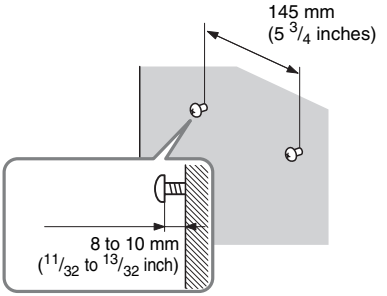
1 Prepare screws (not supplied) that are suitable for the hole on the back of each speaker. See the illustrations below.



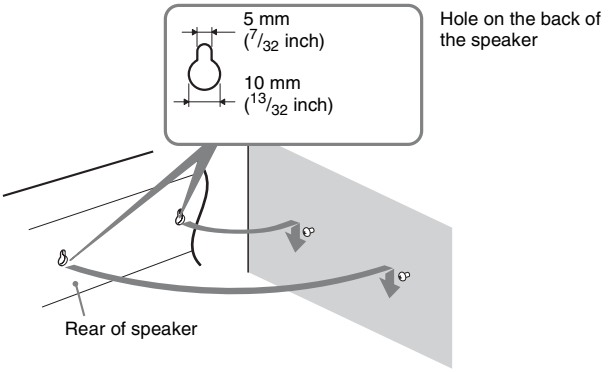


Hole on the back of the speaker

2 **Fasten the screws to the wall.**



3 **Hang the speakers on the screws.**



Step 2: Connecting the System

For connecting the system, read the information on the following pages.
Do not connect the AC power cord (mains lead) of the unit to a wall outlet (mains) until all the other connections are made.

Note

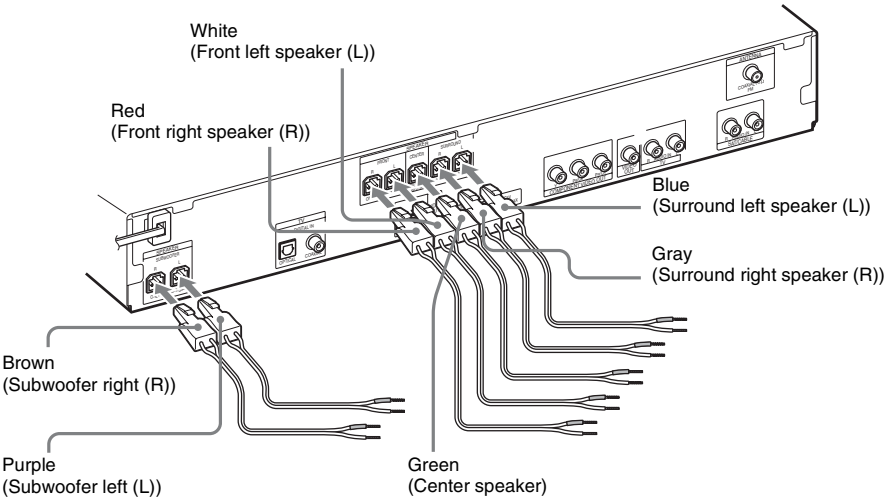
• When you connect another component with a volume control, turn down the volume of the other components to a level where sound is not distorted.

Connecting the speakers

The connector of the speaker cords and the color tube are color-coded depending on the type of speaker. Connect the speaker cords to match the color of the SPEAKER jacks of the unit.
Be sure to match the speaker cords to the appropriate terminals on the speakers: the speaker cord with the color tube to ⊕, and the speaker cord without the color tube to ⊖. Do not catch the speaker cord insulation (rubber covering) in the speaker terminals.

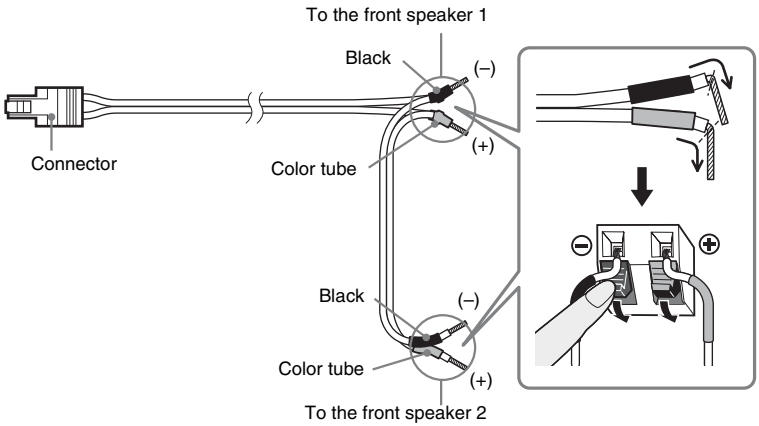
To connect speaker cords to the unit

When connecting to the unit, insert the connector until it clicks.

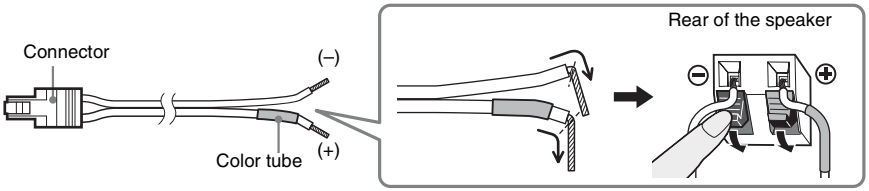


To connect speaker cords to the speaker

For the front speakers

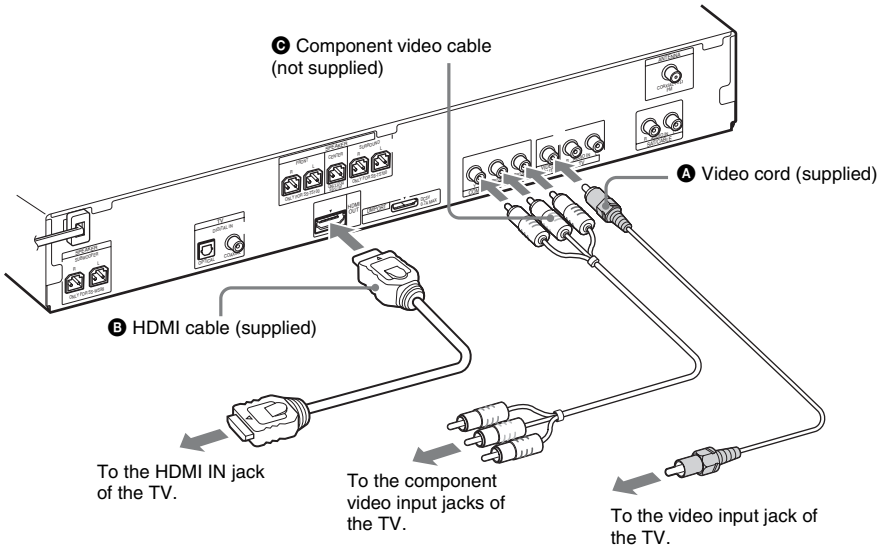


For the other speakers



Connecting the TV (Video connection)

This connection sends a video signal to the TV.
Depending on the jacks on your TV, select the connection method.


C Component video cable (not supplied)
A Video cord (supplied)
B HDMI cable (supplied)
To the HDMI IN jack of the TV.
To the component video input jacks of the TV.
To the video input jack of the TV.

Method 1: Video cord (A) connection

This is the basic connection.

Method 2: HDMI* cable (B) and video cord (A) connection

If your TV has an HDMI jack, connect to the TV both with an HDMI cable and video cord. Picture quality will be improved compared to using only the video cord connection.
When connecting with the HDMI cable, you need to select the type of output signal (page 24).
To view images from the DIGITAL MEDIA PORT adapter, you need to connect to the TV with the video cord. Video signals from the DIGITAL MEDIA PORT adapter are not output via the HDMI OUT jack.

* HDMI (High-Definition Multimedia Interface)

Method 3: Component video cable (C) and video cord (A) connection

If your TV does not have an HDMI jack, but has component video input jacks, connect to the TV both with a component video cable and video cord. Picture quality will be improved compared to using only the video cord connection.
When connecting with the component video cable, you need to set the type of output signal to progressive format (page 24).
To view images from the DIGITAL MEDIA PORT adapter, you need to connect to the TV with the video cord. Video signals from the DIGITAL MEDIA PORT adapter are not output via the COMPONENT VIDEO OUT jack.

To change the color system (PAL or NTSC) (Asian, Australian, Middle Eastern, and South African models only)

Depending on the TV to be connected, you may be required to select either PAL or NTSC for the color system.

The initial setting of the system for Australian, Middle Eastern, and South African models is PAL.

The initial setting of the system for Asian models is NTSC.

1 Turn off the system by pressing I/⏻.

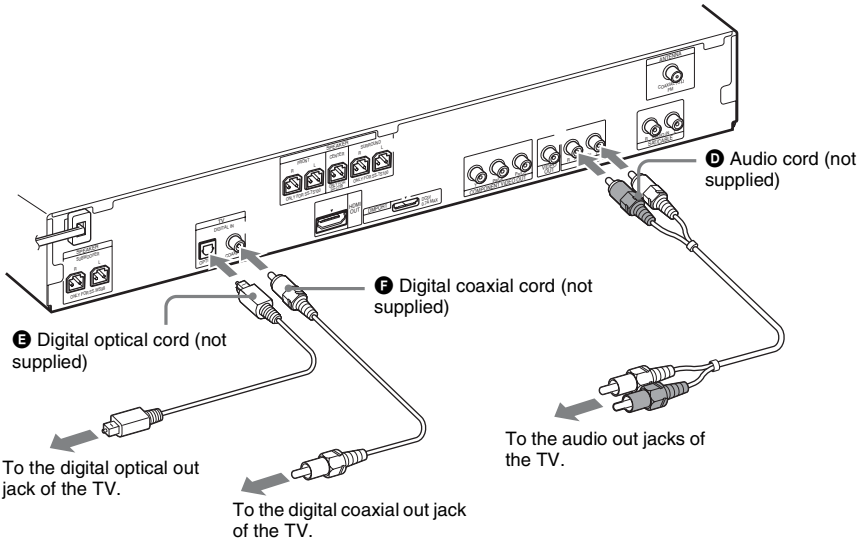
2 Turn on the system by pressing I/⏻ on the unit while turning OPERATION DIAL on the unit counterclockwise.

Each time you perform this operation, the color system toggles between PAL and NTSC.

"NTSC" lights up in the front panel display when the color system is set to NTSC.

Connecting the TV (Audio connection)

This connection sends an audio signal to the unit from the TV. To listen to TV sound via the system, perform this connection.


Ⓓ Audio cord (not supplied)
Ⓕ Digital coaxial cord (not supplied)
Ⓔ Digital optical cord (not supplied)
To the digital optical out jack of the TV.
To the digital coaxial out jack of the TV.
To the audio out jacks of the TV.

Method 1: Audio cord (Ⓓ) connection

This is the basic connection and sends an analog audio signal.

Method 2: Digital optical cord (Ⓔ) or digital coaxial cord (Ⓕ) connection

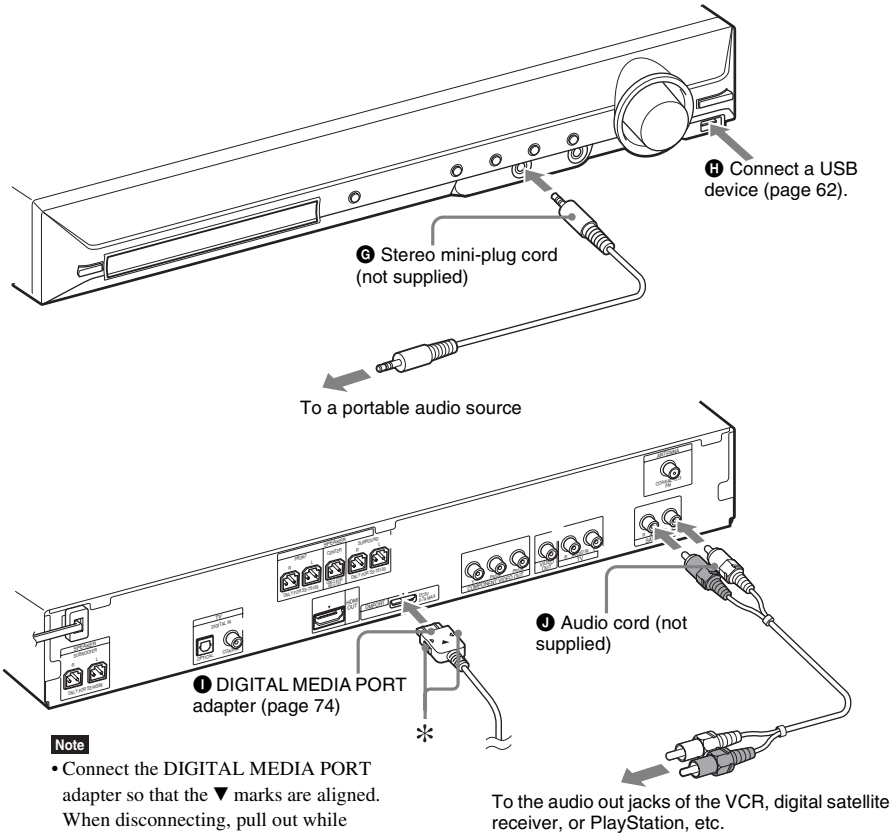
When the TV has a digital optical or coaxial output jack, you can improve sound quality by connecting with a digital optical or coaxial cord in addition to an audio cord connection.

Note

• The system can accept both digital and analog signals. Digital signals have priority over analog signals. (COAXIAL has priority over OPTICAL.) If the digital signal ceases, the analog signal will be processed after 2 seconds.

Connecting the other components

You can enjoy connected components via the system's speakers.
Portable audio source (not supplied): G
USB device (not supplied): H
DIGITAL MEDIA PORT adapter (not supplied): I
VCR, digital satellite receiver, or PlayStation, etc. (not supplied): J

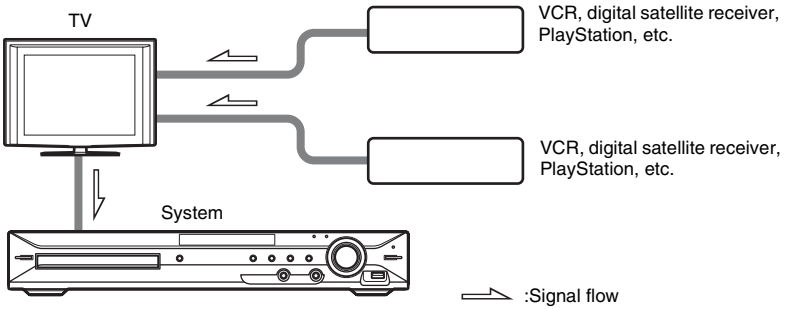

H Connect a USB device (page 62).
G Stereo mini-plug cord (not supplied)
To a portable audio source
J Audio cord (not supplied)
I DIGITAL MEDIA PORT adapter (page 74)
To the audio out jacks of the VCR, digital satellite receiver, or PlayStation, etc.

Note

• Connect the DIGITAL MEDIA PORT adapter so that the ▼ marks are aligned. When disconnecting, pull out while pressing ✻.

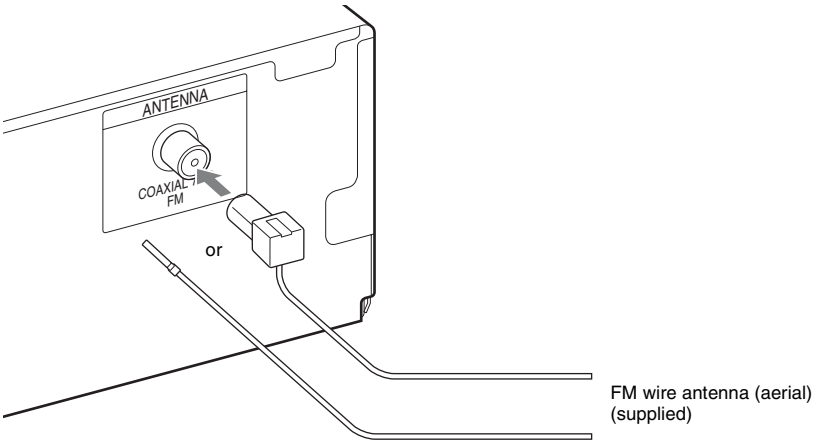
If your TV has multiple audio/video inputs

You can enjoy sound with the speakers of the system through the connected TV. Connect the components as follows.



Select the component on the TV. For details, refer to the operating instructions of the TV.
If the TV does not have multiple audio/video inputs, a switcher will be necessary to receive sound from more than one component.

Connecting the antenna (aerial)

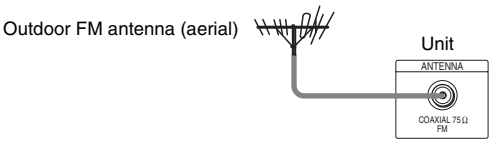


Note

- Be sure to fully extend the FM wire antenna (aerial).
- After connecting the FM wire antenna (aerial), keep it as horizontal as possible.

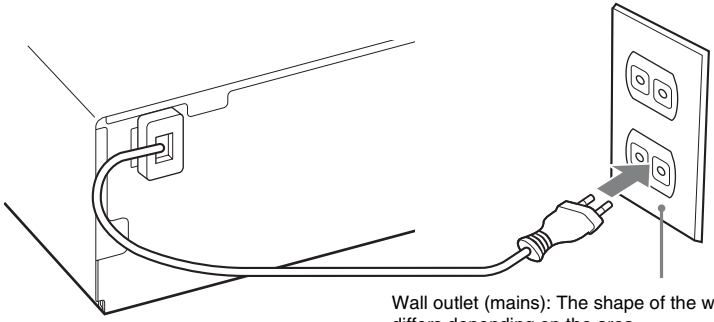
Tip

- If you have poor FM reception, use a 75-ohm coaxial cable (not supplied) to connect the unit to an outdoor FM antenna (aerial) as shown below.



Connecting the AC power cord (mains lead)

Before connecting the AC power cord (mains lead) of the unit to a wall outlet (mains), connect all the speakers to the unit.



Wall outlet (mains): The shape of the wall outlet (mains) differs depending on the area.

About the demonstration

After connecting the AC power cord (mains lead), the demonstration appears in the front panel display.

Setting the demonstration mode to on/off

1 **Press I/⏻ on the unit.**

The system turns on.

2 **Press SYSTEM MENU.**

3 **Press ↑/↓ repeatedly until "DEMO" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ to select a setting.**

- "DEMO ON": On.
- "DEMO OFF": Off.

5 **Press ⊕.**

The setting is made.

6 **Press SYSTEM MENU.**

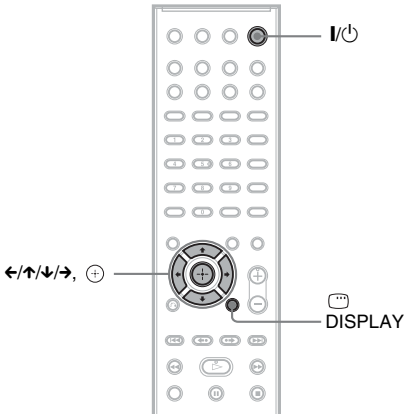
The system menu turns off.

Tip

- When you purchase the system new, or if the system is at its factory default settings (ex., after performing "COLD RESET" (page 88)), you can turn off the demonstration simply by pressing I/⏻ on the remote.

Step 3: Performing the Quick Setup

Follow the Steps below to make the basic adjustments for using the system.
Displayed items vary depending on the area.



1 **Turn on the TV.**

2 **Press I/⏻.**

Note

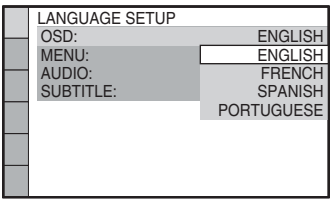
• Make sure that the function is set to "DVD" (page 25).

3 **Switch the input selector on your TV so that the signal from the system appears on the TV screen.**

[Press [ENTER] to run QUICK SETUP.] appears at the bottom of the TV screen. If this message does not appear, recall the Quick Setup display (page 23).

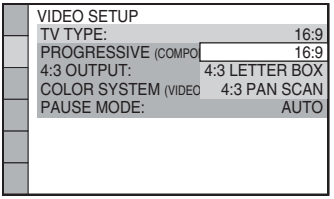
4 **Press ⊕ without inserting a disc.**

The Setup Display for selecting the language used in the on-screen display appears.



5 **Press ↑/↓ to select a language, then press ⊕.**

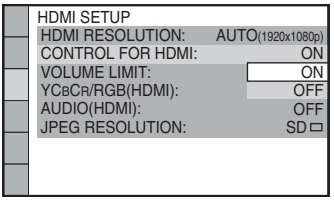
The Setup Display for selecting the aspect ratio of the TV to be connected appears.



6 **Press ↑/↓ to select the setting that matches your TV type, then press ⊕.**

• [16:9]: For a wide-screen TV or a 4:3 standard TV with a wide-screen mode (page 49)
• [4:3 LETTER BOX] or [4:3 PAN SCAN]: For a 4:3 standard TV (page 49)

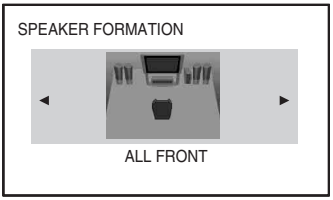
The Setup Display for the Control for HDMI function appears.



7 **Press ↑/↓ to select the setting, then press ⊕.**

• [ON]: The Control for HDMI function (page 59) is set to on.
• [OFF]: The Control for HDMI function is set to off.

The Setup Display for selecting the speaker formation appears.



Note

• The image in the illustration above is different from the actual system.

8 Press ←/→ to select the speaker formation image as the speakers are actually positioned, then press ⊕.

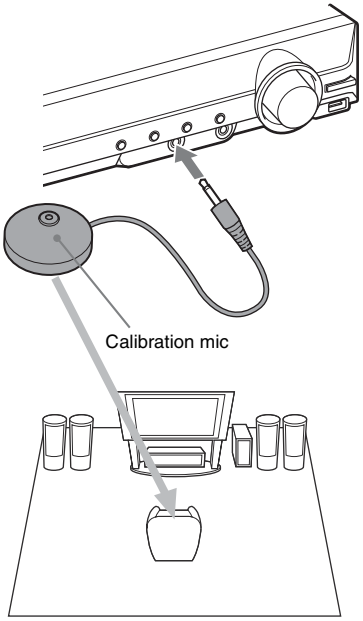
When you install all the speakers in front of the listening position (page 10), select [ALL FRONT].

For details, see "Getting Optimal Surround Sound for a Room" (page 75).

9 Connect the calibration mic (supplied) to the A.CAL MIC jack on the front panel.

Set up the calibration mic at ear level using a tripod, etc. (not supplied).

The front of each speaker should face the calibration mic, and there should be no obstruction between the speakers and the calibration mic.



10 Press ←/→ to select [YES], then press ⊕.

[AUTO CALIBRATION] starts.

Be quiet during the measurement.

Note

• Loud test sounds are output when [AUTO CALIBRATION] starts. You cannot turn the volume down. Give consideration to children and neighbors.

• The environment of the room in which the system is installed may affect measurements. When the measurements differ considerably from the status of the speaker installation, perform the speaker settings manually by following "Settings for the speakers" (page 53).

• For [FRONT L], [FRONT R], or [SUBWOOFER], the system calibrates all the speakers, but only the measurement of the nearer speaker is displayed.

11 Unplug the calibration mic, press ←/→ to select [YES], then press ⊕.

Quick Setup is finished. All connections and setup operations are complete.

To quit the Quick Setup

Press DISPLAY in any Step.

To recall the Quick Setup display

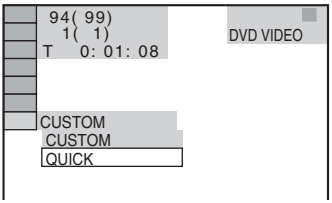
1 Press FUNCTION repeatedly until "DVD" appears in the front panel display.

2 Press DISPLAY while the system is in stop mode.

The Control Menu display appears on the TV screen.

3 Press ↑/↓ to select [SETUP], then press ⊕.

The options for [SETUP] appear.



4 Press ↑/↓ to select [QUICK], then press ⊕.

The Quick Setup display appears.

Setting the type of video output to match your TV

Depending on the connection of the TV (page 15), select the type of video output of the system.

To select the type of video signal output from the HDMI OUT jack

When you connect the unit and the TV with an HDMI cable, select the type of video signals output from the HDMI OUT jack.
For details, refer also to the operating instructions supplied with the TV/projector, etc.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

The Setup Display appears.

5 **Press ↑/↓ to select [HDMI SETUP], then press ⊕.**

The options for [HDMI SETUP] appear.

6 **Press ↑/↓ to select [HDMI RESOLUTION], then press ⊕.**

7 **Press ↑/↓ to select the desired setting, then press ⊕.**

- [AUTO (1920 × 1080p)]: The system outputs the optimal video signal for the connected TV.
- [1920 × 1080i]: The system outputs 1920 × 1080i* video signals.
- [1280 × 720p]: The system outputs 1280 × 720p* video signals.
- [720 × 480p]**: The system outputs 720 × 480p* video signals.

* i: interlace, p: progressive

** Depending on the area, [720 × 480/576p] may appear.

Does your TV accept progressive signals?

Progressive is a method for displaying TV images which reduces flickering and sharpens the image. To use this method, you need to connect to a TV that accepts progressive signals.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

The Setup Display appears.

5 **Press ↑/↓ to select [VIDEO SETUP], then press ⊕.**

The options for [VIDEO SETUP] appear.

6 **Press ↑/↓ to select [PROGRESSIVE (COMPONENT OUT)], then press ⊕.**

7 **Press ↑/↓ to select the desired setting, then press ⊕.**

[OFF]: The system does not output progressive signals. Select this setting when:

– your TV does not accept progressive signals, or,

– your TV is connected via jacks other than the COMPONENT VIDEO OUT jacks.

[ON]: The system outputs progressive signals. Select this setting when:

– your TV accepts progressive signals, and,

– the TV is connected via the COMPONENT VIDEO OUT jacks.

When you select [ON], the confirmation display appears. Follow the Steps below.

8 **Press ←/→ to select [START], then press ⊕.**

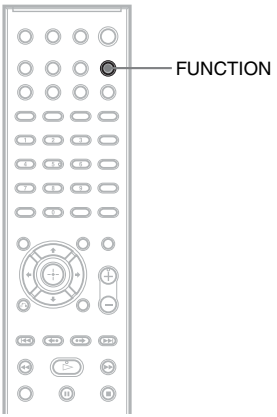
The system outputs a progressive signal for 5 seconds. Check that the screen is displayed correctly.

9 **Press ←/→ to select [YES], then press ⊕.**

The system outputs a progressive signal. When you select [NO], the system does not output a progressive signal.

Step 4: Selecting the Source

You can select the playback source.



Press FUNCTION repeatedly until the desired function appears in the front panel display.

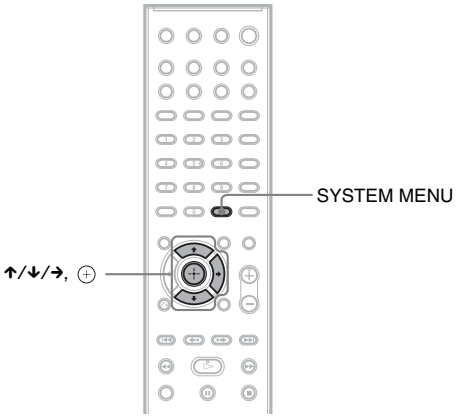
Each time you press FUNCTION, the function changes as follows.

"DVD" → "TUNER FM" → "USB" → "TV" → "SAT/CABLE" → "DMPORT" → "AUDIO" → …

Function	Source
"DVD"	Disc that is played by the system
"TUNER FM"	FM radio (page 56)
"USB"	USB device (page 62)
"TV"	TV
"SAT/CABLE"	Component that is connected to the SAT/CABLE jacks on the rear panel
"DMPORT"	DIGITAL MEDIA PORT adapter (page 74)
"AUDIO"	Portable audio source that is connected to the AUDIO IN jack on the front panel

Step 5: Enjoying Surround Sound

You can enjoy surround sound simply by selecting one of the system's pre-programmed decoding modes. They bring the exciting and powerful sound of movie theaters into your home.



Enjoying TV sound with the 5.1 channel surround sound effect

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "DEC. MODE" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until "PRO LOGIC" appears in the front panel display.**

4 **Press ⊕.**

The setting is made.

5 **Press SYSTEM MENU.**

The system menu turns off.

Note

• When TV program sound is monaural, sound is output only from the center speaker.

Selecting surround sound effects based on your listening preference

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "DEC. MODE" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ repeatedly until the surround sound effect you want appears in the front panel display.**

See the table below for surround sound effect descriptions.

4 **Press ⊕.**

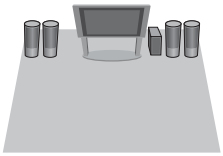
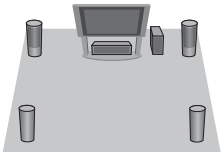
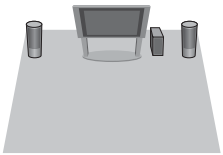
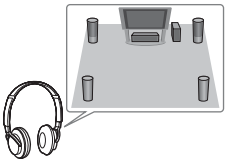
The setting is made.

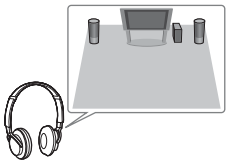
5 **Press SYSTEM MENU.**

The system menu turns off.

About speaker output

The table below describes the options when you connect all the speakers to the unit and you set [SPEAKER FORMATION] to [STANDARD] (page 75).
For Australian models, the default setting is “A.F.D. STD.” For other models, the default setting is “A.F.D. MULTI” (when connecting the headphones to the unit or surround amplifier, the default setting is “HP THEATER”).

Sound from	Surround effect	Effect
Depending on the source.	“A.F.D. STD” (AUTO FORMAT DIRECT STANDARD)	The system discriminates the sound format of the source and presents sound as it was recorded/encoded.
	“A.F.D. MULTI” (AUTO FORMAT DIRECT MULTI)	• 2 channel source: The system outputs 2 channel sound from the front and surround speakers by assigning the 2 channel sound to the surround left and right channels. • Multi-channel source: The system outputs sound from the speakers depending on the number of channels of the source. To obtain the S-Force PRO Front Surround, set this mode.
	“PRO LOGIC” “PLII MOVIE” “PLII MUSIC”	• 2 channel source: The system simulates surround sound from 2 channel sources and outputs sound from all the speakers. – “PRO LOGIC” performs Dolby Pro Logic decoding. – “PLII MOVIE” performs Dolby Pro Logic II movie mode decoding. – “PLII MUSIC” performs Dolby Pro Logic II music mode decoding. • Multi-channel source: The system outputs sound from the speakers depending on the number of channels of the source.
	“2CH STEREO”	The system outputs the sound from the front speakers and subwoofers regardless of sound format or number of channels. Multi-channel surround formats are downmixed to 2 channels.
	“HP THEATER”* (HEADPHONE THEATER)	The system outputs the sound from the headphones by adding a surround effect regardless of sound format or number of channels.

Sound from	Surround effect	Effect
	"HP 2CH" (HEADPHONE 2 CHANNEL STEREO)	The system outputs the sound from the headphones regardless of sound format or number of channels. Multi-channel surround formats are downmixed to 2 channels.

* DCS technology (page 103) is used.

To turn the surround effect off

Select "A.F.D. STD," "2CH STEREO," or "HP 2CH" for "DEC. MODE."

Note

- When you select "A.F.D. MULTI," depending on the disc or source, the beginning of the sound may be cut off while the optimum mode is automatically selected. To avoid cutting the sound, select "A.F.D. STD."
- When the bilingual broadcast sound is input, "PRO LOGIC," "PLII MOVIE," and "PLII MUSIC" are not effective.
- "PRO LOGIC," "PLII MOVIE," and "PLII MUSIC" are canceled when you set the sound mode (page 83) to either of the following settings.
  - "SPORTS"
  - "MOVIE-D.C.S.-"
- You cannot select the decoding mode while the system is loading a disc.
- You cannot select the decoding mode during karaoke mode.
- Depending on the input stream, the decoding mode may not be effective.

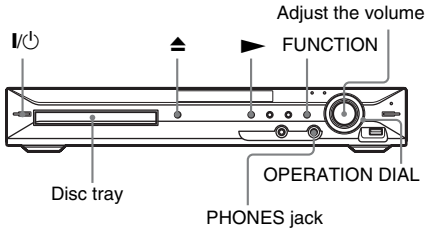
Tip

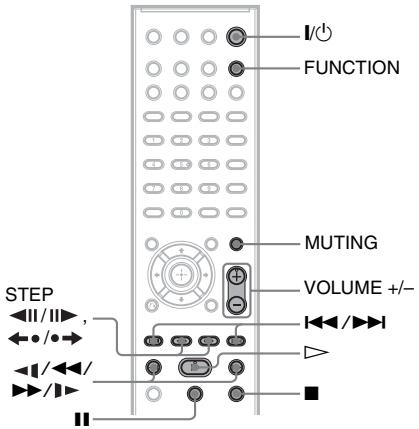
- The system memorizes the last decoding mode selected for each function.
  Whenever you select a function such as "DVD" or "TUNER FM," the decoding mode that was last applied to the function is automatically applied again. For example, if you select "DVD" with "PRO LOGIC" as the decoding mode, then change to another function, and then return to "DVD," "PRO LOGIC" will be applied again.

Playing a Disc

DVD-V DVD-VR VIDEO CD SuperAudioCD CD
DATA-CD DATA DVD

Depending on the DVD VIDEO or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with your disc.





1 **Turn on your TV.**

2 **Switch the input selector on the TV to this system.**

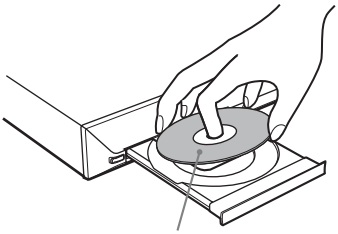
3 **Press I/⏻.**

The system turns on.

Unless the system is set to “DVD,” press FUNCTION to select “DVD.”

4 **Press ⏏ on the unit to open the disc tray, and place a disc on the tray.**

Place one disc on the tray, and then press ⏏.



With the label side up.

Note

- When you play an 8 cm disc, place it on the inner circle of the tray. Be careful that the disc is not skewed on the inner circle of the tray.
- Do not place more than one disc on the tray.

5 **Press ▻.**

The system starts playback (continuous play).

6 **Adjust the volume by using VOLUME +/– on the remote or the VOLUME control on the unit.**

The volume level appears on the TV screen and in the front panel display.

Note

- When you set the Control for HDMI function to on, the TV that is connected to the system with an HDMI cable can be sync-operated with the system. For details, see “Using the Control for HDMI Function for “BRAVIA” Sync” (page 59).

To turn the system off

Press I/⏻ while the system is on. The system enters standby mode.

To save power in standby mode

Press I/⏻ while the system is on.

To enter power saving mode, make sure that the system is in the following status.

– “DEMO” is set to “OFF” (page 21).

– [CONTROL FOR HDMI] is set to [OFF] (page 59).

To use the headphones

Connect the headphones to the PHONES jack on the unit. The sound of the system is muted.

Other operations

To	Press
Stop	■
Pause	❚❚
Resume play after pause	❚❚ or ▷
Go to the next chapter, track, or scene[1)]	▶▶❙
Go back to the preceding chapter, track, or scene[1)]	❙◀◀ twice in a second. When you press ❙◀◀ once, you can go to the beginning of the current chapter, track, or scene.
Find the desired chapter, track, or scene using OPERATION DIAL on the unit[1)]	Turning OPERATION DIAL clockwise is the same operation as pressing ▶▶❙. Turning OPERATION DIAL counterclockwise is the same operation as pressing ❙◀◀.
Turn off the sound temporarily	MUTING. To cancel, press it again or press VOLUME + to adjust the sound volume.
Stop play and remove the disc	⏏ on the unit.
Locate a point quickly by playing a disc in fast forward or fast reverse (Scan)[1)]	▶▶/❙► or ◄❙/◀◀ while playing a disc. Each time you press ▶▶/❙► or ◄❙/◀◀ during scan, the playback speed changes. To return to normal speed, press ▷. Actual speeds may differ with some discs.
Watch frame by frame (Slow-motion Play)[2)]	▶▶/❙► or ◄❙/◀◀[3)] while the system is in pause mode. Each time you press ▶▶/❙► or ◄❙/◀◀[3)] during Slow-motion Play, the playback speed changes. Two speeds are available. To return to normal playback speed, press ▷.
Play one frame at a time (Freeze Frame)[2)4)5)]	STEP ❚❚► to go to the next frame while the system is in pause mode. Press STEP ◄❚❚ to go to the preceding frame while the system is in pause mode (DVD VIDEO/DVD-R/DVD-RW only). To return to normal playback, press ▷.
Replay the previous scene (10 seconds before)[6)]	←● (instant replay) during playback.
Briefly fast forward the current scene (30 seconds ahead)[7)]	●→ (instant advance) during playback.

[1)]Except for JPEG image files.

[2)]DVD VIDEO/DVD-R/DVD-RW/VIDEO CD only.

[3)]Except for VIDEO CDs.

[4)]You cannot search for a still picture on a DVD-VR.

[5)]For a DATA CD/DATA DVD, this function works only for video files.

[6)]DVD VIDEO/DVD-RW/DVD-R only. The button can be used except for DivX/MPEG4 video files.

[7)]DVD VIDEO/DVD-RW/DVD-R/DVD+RW/DVD+R only. The button can be used except for DivX/MPEG4 video files.

About the Dual Stereo Subwoofer function

When you connect two subwoofers to the unit, you can enjoy a richer, lower ambience (Dual Stereo Subwoofer (page 103)).

This function is activated automatically when:

– the system is set to “DVD” by pressing FUNCTION.
– you play a CD.
– you set the decoding mode (page 26) to “A.F.D. STD,” “A.F.D. MULTI,” or “2CH STEREO.”
– set the sound mode (page 83) to “AUTO,” “MOVIE,” or “MUSIC.”
– set the karaoke mode (page 78) to off.
– you set [SPEAKER FORMATION] (page 75) to [STANDARD], [NO CENTER],

[ALL FRONT], or [ALL FRONT - NO CENTER].

Displaying multi-angles and subtitles

To change the angles

DVD-V

If various angles (multi-angles) for a scene are recorded on a DVD VIDEO, you can change the viewing angle.

Press ANGLE during playback to select the desired angle.

To display the subtitles

DVD-V DVD-VR DATA-CD DATA DVD

If subtitles are recorded on a disc, you can turn the subtitles on/off during playback. If multilingual subtitles are recorded on the disc, you can change the subtitle language during playback, or turn the subtitles on/off whenever you want.

Press SUBTITLE during playback to select the desired subtitle language.

Note

- You can select the subtitles if the DivX video file has an ".avi" or ".divx" extension and contains subtitle information within the same file.

Changing the sound

DVD-V DVD-VR VIDEO CD CD DATA-CD DATA DVD

When the system is playing a DVD VIDEO or DATA CD/DATA DVD (DivX video files) recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio, or DTS), you can change the audio format. If the DVD VIDEO is recorded with multilingual tracks, you can also change the language.
With a VIDEO CD, CD, DATA CD, or DATA DVD, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers.
You cannot change the sound for a Super Audio CD.

Press AUDIO repeatedly during playback to select the desired audio signal.

■ DVD VIDEO
Depending on the DVD VIDEO, the choice of language varies.
When 4 digits are displayed, they indicate a language code. See "Language Code List" (page 106) to confirm which language the code represents. When the same language is displayed two or more times, the DVD VIDEO is recorded in multiple audio formats.

■ DVD-VR
The types of sound tracks recorded on a disc are displayed.
Example:

- [1: MAIN] (main sound)
- [1: SUB] (sub sound)
- [1: MAIN+SUB] (main and sub sound)
- [2: MAIN]
- [2: SUB]
- [2: MAIN+SUB]

■ VIDEO CD/CD/DATA CD (MP3 file)/DATA DVD (MP3 file)

- [STEREO]: The standard stereo sound.
- [1/L]: The sound of the left channel (monaural).
- [2/R]: The sound of the right channel (monaural).

■ DATA CD (DivX video file)/DATA DVD (DivX video file)
The choice of DATA CD or DATA DVD audio signal formats differs, depending on the DivX video file contained on the disc. The format appears on the TV screen.

■ Super VCD

- [1:STEREO]: The stereo sound of audio track 1.
- [1:1/L]: The sound of the left channel of audio track 1 (monaural).
- [1:2/R]: The sound of the right channel of audio track 1 (monaural).
- [2:STEREO]: The stereo sound of audio track 2.

- [2:1/L]: The sound of the left channel of audio track 2 (monaural).
- [2:2/R]: The sound of the right channel of audio track 2 (monaural).

Checking the audio signal format

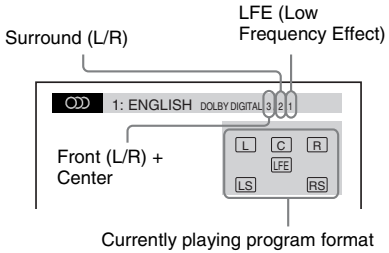
DVD-V DATA-CD DATA DVD

If you press AUDIO repeatedly during playback, the format of the current audio signal (PCM, Dolby Digital, DTS, etc.) appears as shown below.

■ DVD

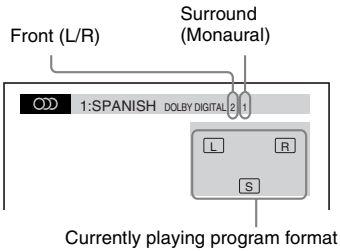
Example:

Dolby Digital 5.1 channel



Example:

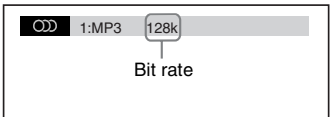
Dolby Digital 3 channel



■ DATA CD (video file)/DATA DVD (video file)

Example:

MP3 audio



Selecting a playback area for a Super Audio CD

SACD

Some Super Audio CDs consist of a 2 channel playback area and a multi-channel playback area. You can select the playback area you want to listen to.

1 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [MULTI/2CH], then press ⊕.**

The options for [MULTI/2CH] appear.

3 **Press ↑/↓ to select the desired setting and press ⊕.**

- [MULTI]: You can play the multi-channel playback area.
- [2CH]: You can play the 2 channel playback area.

Note

- When the Super Audio CD does not have a multi-channel playback area, you cannot select the playback area.

Changing a playback layer for a hybrid Super Audio CD

SACD

Some Super Audio CDs consist of a Super Audio CD layer and a CD layer. You can change the playback layer you want to listen to.

1 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [SUPER AUDIO CD/CD LAYER], then press ⊕.**

■ When the current layer is the CD layer
[SUPER AUDIO CD] appears.

■ When the current layer is the Super Audio CD layer
[CD] appears.

3 **Press ⊕ to change the layer.**

- [SUPER AUDIO CD]: You can play the Super Audio CD layer.
  When the system is playing a Super Audio CD layer, "SA-CD" lights up in the front panel display.
- [CD]: You can play the CD layer.
  When the system is playing a CD layer, "CD" lights up in the front panel display.

Note

- Each play mode function works only within the selected layer or playback area.
- When you select a CD layer, you cannot change playback areas.
- Super Audio CD audio signals are not output from the HDMI OUT jack.

Playing a VIDEO CD with PBC functions (Ver. 2.0)

(PBC Playback)

VIDEO CD

With PBC (Playback Control) functions, you can enjoy simple interactive operations, search functions, and other such operations.
PBC playback allows you to play a VIDEO CD interactively by following the menu on the TV screen.

1 **Start playing a VIDEO CD with PBC functions.**

The menu for your selection appears.

2 **Select the item number you want using the number buttons.**

If you make a mistake, press CLEAR to cancel the number.

3 **Press ⊕.**

4 **Follow the instructions in the menu for interactive operations.**

Refer to the operating instructions supplied with the disc, as the operating procedure may differ depending on the VIDEO CD.

To go back to the menu

Press RETURN.

Note

- Depending on the VIDEO CD, [Press ENTER] in Step 3 may appear as [Press SELECT] in the operating instructions supplied with the disc. In this case, press ▷.

Tip

- To play without using the PBC function, press ⏮/⏭ or the number buttons while the system is in stop mode to select a track, then press ▷ or ⊕. The system starts playback. You cannot play still pictures such as a menu. To return to PBC playback, press ■ twice, then press ▷.

Resuming playback from the point where you stopped the disc

(Resume Play)

DVD-V DVD-VR VIDEO CD SUPER AUDIO CD CD DATA-CD DATA DVD

When you stop the disc, the system remembers the point where you pressed ■ and "RESUME" appears in the front panel display. As long as you do not remove the disc, Resume Play will work even if the system is set to standby mode by pressing I/⏻.

1 **While playing a disc, press ■ to stop playback.**

"RESUME" appears in the front panel display.

2 **Press ▷.**

The system starts playback from the point where you stopped the disc in Step 1.

Note

- Depending on where you stop the disc, the system may not resume playback from exactly the same point.
- The point where you stopped playing may be cleared when:
  - you eject the disc.
  - the system enters standby mode (DATA CD/ DATA DVD only).
  - you change or reset the settings on the Setup Display.
  - you change the parental control level.
  - you change the function by pressing FUNCTION.
  - you disconnect the AC power cord (mains lead).
- For a DVD-VR, VIDEO CD, Super Audio CD, CD, DATA CD, or DATA DVD, the system remembers the resume playback point for the current disc.
- Resume Play does not work during Program Play and Shuffle Play.
- This function may not work properly with some discs.

Tip

- To play from the beginning of the disc, press ■ twice, then press ▷.

To enjoy a disc that you played before with resume playback

(Multi-disc Resume)

DVD-V VIDEO CD

This system recalls the point where you stopped the disc the last time it was played and resumes playback from that point the next time you insert the same disc. When the resume playback memory is full, the resume playback point for the earliest disc is deleted.
To activate this function, set [MULTI-DISC RESUME] in [SYSTEM SETUP] to [ON]. For details, see "[MULTI-DISC RESUME] (DVD VIDEO/VIDEO CD only)" (page 52).

Note

- This system stores the resume points in memory for up to 10 discs.

Tip

- To play from the beginning of the disc, press ■ twice, then press ▷.

Using Play Mode

Creating your own program

(Program Play)

VIDEO CD CD

You can play the contents of a disc in the order you want by arranging the order of the tracks on the disc to create your own program. You can program up to 99 tracks.

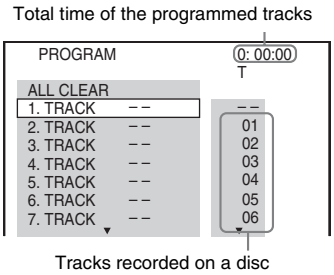
1 **Press DISPLAY.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [PROGRAM], then press ⊕.**

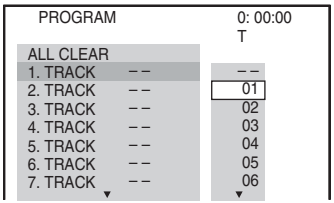
The options for [PROGRAM] appear.

3 **Press ↑/↓ to select [SET →], then press ⊕.**



4 **Press →.**

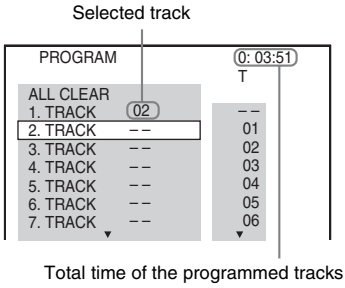
The cursor moves to the track row [T] (in this case, [01]).



5 **Select the track you want to program.**

For example, select track [02].

Press ↑/↓ to select [02] under [T], then press ⊕.



6 **To program other tracks, repeat Steps 4 to 5.**

The programmed tracks are displayed in the selected order.

7 **Press ▷ to start Program Play.**

Program Play starts.

When the program ends, you can restart the same program again by pressing ▷.

To return to normal play

Press CLEAR while the display for the program setting is not displayed on the TV screen, or select [OFF] in Step 3. To play the same program again, select [ON] in Step 3 and press ⊕.

To turn off the Control Menu display

Press DISPLAY repeatedly until the Control Menu display is turned off.

To change or cancel a program

1 **Follow Steps 1 to 3 of "Creating your own program."**

2 **Press ↑/↓ to select the program number of the track you want to change or cancel.**

If you want to delete the track from the program, press CLEAR.

3 **Follow Step 5 for new programming.**

To cancel a program, select [--] under [T], then press ⊕.

To cancel all of the tracks in the programmed order

1 **Follow Steps 1 to 3 of "Creating your own program."**

2 **Press ↑ and select [ALL CLEAR].**

3 **Press ⊕.**

Note

• When you press CLEAR to return to normal play, Shuffle Play and Repeat Play are also canceled.

Playing in random order

(Shuffle Play)

VIDEO CD SuperAudioCD CD DATA-CD DATA DVD

You can play the contents on a disc in random order. Subsequent Shuffle Play may produce a different playing order.

Note

• The same song may be played repeatedly when you are playing MP3 files.

1 **Press DISPLAY during playback.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [SHUFFLE], then press ⊕.**

The options for [SHUFFLE] appear.

3 **Press ↑/↓ to select the item to be shuffled.**

■ VIDEO CD/Super Audio CD/CD

• [OFF]: Off.
• [TRACK]: You can shuffle tracks on the disc.

■ During Program Play

• [OFF]: Off.
• [ON]: You can shuffle tracks selected in Program Play.

■ DATA CD (except for video files)/ DATA DVD (except for video files)

• [OFF]: Off.
• [ON (MUSIC)]: You can shuffle MP3 files in the folder on the current disc. When no folder is selected, the first folder will play in random order.

4 **Press ⊕.**

Shuffle Play starts.

To return to normal play

Press CLEAR, or select [OFF] in Step 3.

To turn off the Control Menu display

Press ▭ DISPLAY repeatedly until the Control Menu display is turned off.

Note

- You cannot use Shuffle Play with a VIDEO CD or Super VCD with PBC playback.
- When you press CLEAR to return to normal play, Program Play and Repeat Play are also canceled.

Playing repeatedly

(Repeat Play)

DVD-V DVD-VR VIDEO CD SuperAudioCD CD DATA-CD DATA DVD

You can play the contents on a disc repeatedly. You can use a combination of Shuffle Play or Program Play modes.

1 **Press ▭ DISPLAY during playback.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [REPEAT], then press ⊕.**

The options for [REPEAT] appear.

3 **Press ↑/↓ to select the item to be repeated.**

■ DVD VIDEO/DVD-VR

- [OFF]: Off.
- [DISC]: You can repeat all of the titles on the disc.
- [TITLE]: You can repeat the current title on a disc.
- [CHAPTER]: You can repeat the current chapter on a disc.

■ VIDEO CD/Super Audio CD/CD

- [OFF]: Off.
- [DISC]: You can repeat all of the tracks on the disc.
- [TRACK]: You can repeat the current track.

■ DATA CD/DATA DVD

- [OFF]: Off.
- [DISC]: You can repeat all of the folders on the disc.
- [FOLDER]: You can repeat the current folder.
- [TRACK] (MP3 files only): You can repeat the current file.
- [FILE] (video files only): You can repeat the current file.

4 **Press ⊕.**

The item is selected.

To return to normal play

Press CLEAR, or select [OFF] in Step 3.

To turn off the Control Menu display

Press ▭ DISPLAY repeatedly until the Control Menu display is turned off.

Note

- You cannot use Repeat Play with a VIDEO CD or Super VCD with PBC playback.
- When the system is playing a DATA CD/DATA DVD which contains MP3 files and JPEG image files, and their playing time is not the same, the audio sound will not match the image.
- When you press CLEAR to return to normal play, Program Play and Shuffle Play are also canceled.

Searching/Selecting Disc Contents

Using the DVD's menu

DVD-V

A DVD is divided into many sections, which make up a picture or music feature. These sections are called "titles." When you play a DVD which contains several titles, you can select the title you want using DVD TOP MENU.
When you play a DVD that allows you to select items such as the language for the subtitles and the language for the sound, select these items using DVD MENU.

1 **Press DVD TOP MENU or DVD MENU.**

The disc's menu appears on the TV screen.
The contents of the menu vary depending on the disc.

2 **Press ←/↑/↓/→ or the number buttons to select the item you want to play or change.**

3 **Press ⊕.**

To display the DVD's menu on the Control Menu display

1 **Press DISPLAY during playback.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [DISC MENU], then press ⊕.**

The options for [DISC MENU] appear.

3 **Press ↑/↓ to select [MENU] or [TOP MENU].**

4 **Press ⊕.**

To turn off the Control Menu display

Press DISPLAY repeatedly until the Control Menu display is turned off.

Selecting an original title or edited title on a DVD-VR

DVD-VR

This function is only available for DVD-VRs with a playlist created.

1 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [ORIGINAL/PLAY LIST], then press ⊕.**

The options for [ORIGINAL/PLAY LIST] appear.

3 **Press ↑/↓ to select a setting.**

- [PLAY LIST]: You can play the titles in the order of the existing playlist.
- [ORIGINAL]: You can play the titles originally recorded.

4 **Press ⊕.**

Searching for a title/chapter/track/scene, etc.

DVD-V DVD-VR VIDEO CD Super Audio CD CD DATA-CD DATA DVD

You can search a DVD VIDEO/DVD-VR by title or chapter, and you can search a VIDEO CD/Super Audio CD/CD/DATA CD/DATA DVD by track, index, or scene. For a DATA CD/DATA DVD, you can search by folder or file. As titles and tracks are assigned unique numbers on the disc, you can select the desired title or track by entering its number. Or, you can search for a scene using the time code.

1 **Press DISPLAY. (If [MEDIA] is set to [MUSIC/PHOTO], press DISPLAY twice.)**

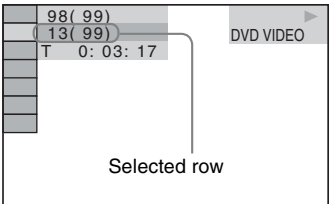
The Control Menu display appears on the TV screen.

2 Press ↑/↓ to select the search method.

Example: [CHAPTER]

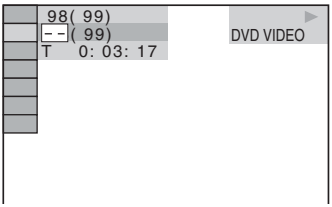
[** (**)] is selected (** refers to a number).

The number in parentheses indicates the total number of titles, chapters, tracks, indexes, scenes, folders, or files.



3 Press ⊕.

[** (**)] changes to [– – (**)].



4 Press ↑/↓ or the number buttons to select the desired number of the title, chapter, track, index, scene, etc.

If you make a mistake, press CLEAR to cancel the number.

5 Press ⊕.

The system starts playback from the selected number.

Tip

• When the Control Menu display is turned off, you can search for a chapter (DVD VIDEO/DVD-R/DVD-RW), track (VIDEO CD/Super Audio CD/CD), or file (DATA CD/DATA DVD (video file)) by pressing the number buttons and ⊕.

To search for a scene using the time code

DVD-V **DVD-VR**

1 In Step 2, select [TIME].

[T **:**:**] (playing time of the current title) is selected.

2 Press ⊕.

[T **:**:**] changes to [T --:--:--].

3 Input the time code using the number buttons.

For example, to find a scene at 2 hours, 10 minutes, and 20 seconds after the beginning: press 2, 1, 0, 2, 0 ([2:10:20]).

4 Press ⊕.

Note

• You cannot search for a scene on a DVD+RW using the time code.

Playing MP3 Files/JPEG Image Files

DATA-CD DATA DVD

You can play MP3 files or JPEG image files:

– which have the extension ".mp3" (MP3 file) or ".jpg"/".jpeg" (JPEG image file).

– which conform to the DCF* image file format.

* "Design rule for Camera File system": Image standards for digital cameras regulated by Japan Electronics and Information Technology Industries Association (JEITA).

Note

- The system will play any files with the extension ".mp3," ".jpg," or ".jpeg" even if they are not in MP3 or JPEG format. Playing these files may generate a loud noise which could damage your speaker system.
- The system does not play back audio in MP3PRO format.
- The system can recognize up to 200 folders, and will not play any folders beyond the 200th. (Depending on the folder configuration, the number of folders that can be recognized by the system may decrease.)
- The system can recognize up to 150 MP3 files/JPEG image files in a folder.
- The system may take a longer time to play files when progressing to the following folder or jumping to other folders.
- The system may not play certain types of JPEG image files (ex. a JPEG image file that is less than 8 (width) × 8 (height)).

Selecting an MP3 file or folder

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Load a DATA CD or DATA DVD.**

After loading the disc, the list of folders appears on the TV screen.

3 **Press DISPLAY.**

The Control Menu display appears on the TV screen.

4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **When [MUSIC] is selected, press DVD MENU. When other than [MUSIC] is selected, press ↑/↓ to select [MUSIC], then press ⊕.**

A list of folders that contain MP3 files appears.

The selected folder is highlighted in yellow.

FOLDER LIST
01 Let's Talk About Love (1985)
02 1st Album (1986)
03 In the Middle of Nowhere (1986)
04 Ready for Romance (1986)
05 In the Garden of Venus (1987)
06 Romantic Warriors (1987)
07 Back for Good (1988)
08 Alone (1999)

6 **Press ↑/↓ to select a folder.**

■ To play MP3 files in a folder

Press ▷ to start playing the selected folder.

■ To select an MP3 file

Press ⊕.

The list of files contained in the folder appears.

Press ↑/↓ to select a file and press ⊕.

The system starts playing the selected file. You can turn the file list off by pressing DVD MENU. Pressing DVD MENU again will display the folder list.

To go to the next or previous page

Press ⏭ / ⏮.

To stop playback

Press ■.

To play the next or previous MP3 file

Press ▶▶| to play the next MP3 file. Press |◀◀ twice to play the previous MP3 file.
When you press |◀◀ once, you can go to the beginning of the current MP3 file.
Note that you can select the next folder by continuing to press ▶▶| after the last file on the current folder, but that you cannot return to the previous folder by pressing |◀◀. To return to the previous folder, select the folder from the folder list.

To return to the previous display

Press ↩ RETURN.

To turn on/off the display

Press DVD MENU.

Other operations

See “Other operations” (page 30).

Selecting a JPEG image file or folder

1 **Press FUNCTION repeatedly until “DVD” appears in the front panel display.**

2 **Load a DATA CD or DATA DVD.**

After loading the disc, the list of folders appears on the TV screen.

3 **Press DISPLAY.**

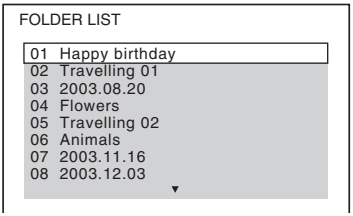
The Control Menu display appears on the TV screen.

4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **When [PHOTO] is selected, press DVD MENU. When other than [PHOTO] is selected, press ↑/↓ to select [PHOTO], then press ⊕.**

A list of folders that contain JPEG files appears.
The selected folder is highlighted in yellow.

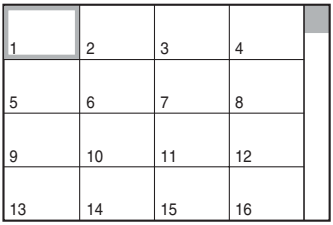


6 **Press ↑/↓ to select a folder.**

■ To go to the next or previous page
Press •→ / ←•.

■ To play JPEG image files in a folder
Press ▷ to start playing the selected folder.
The JPEG images are played as a slide show. You can change the interval of the slide show (page 41), and add effects to the slide show (page 42).

■ To select a JPEG image file by displaying the image browser
Press PICTURE NAVI.
Previews of JPEG image files in the folder appear in 16 subscreens.



Press ←/↑/↓/→ to select the JPEG image file you want to view, then press ⊕.
To return to the previous screen, press ↩ RETURN.

To play the next or previous JPEG image file

Press →/← when the Control Menu display is not displayed. Note that you can select the next folder by continuing to press → after the last image on the current folder, but that you cannot return to the previous folder by pressing ←. To return to the previous folder, select the folder from the folder list.

To rotate a JPEG image file

When a JPEG image file is displayed on the TV screen, you can rotate the JPEG image file in 90 degree increments.
Press ↑/↓ while viewing a JPEG image file.
Press CLEAR to return to normal view.

Note

• You cannot rotate the JPEG image file when you set [JPEG RESOLUTION] in [HDMI SETUP] to [(1920 × 1080i) HD □] or [(1920 × 1080i) HD] (page 51).

To stop playback

Press ■.

To turn on/off the display

Press DVD MENU.

Other operations

See "Other operations" (page 30).

Playing a slide show with sound

You can play a slide show with sound by first placing both MP3 files and JPEG image files in the same folder on a DATA CD or DATA DVD.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Load a DATA CD or DATA DVD.**

After loading the disc, the list of folders appears on the TV screen.

3 **Press DISPLAY.**

The Control Menu display appears on the TV screen.

4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **When [MUSIC/PHOTO] is selected, press DVD MENU. When other than [MUSIC/PHOTO] is selected, press ↑/↓ to select [MUSIC/PHOTO], then press ⊕.**

The list of folders appears.

6 **Press ↑/↓ to select the desired folder and press ▷.**

The system starts playing the selected folder.

You can turn the folder list on/off by pressing DVD MENU repeatedly.

Note

• If you play a large MP3 file and JPEG image file at the same time, the sound may skip. Sony recommends that you set the MP3 bit rate to 128 kbps or lower when creating the file. If the sound still skips, reduce the size of the JPEG image file.

Selecting the slide show duration of JPEG image files

1 **Press DISPLAY. (If [MEDIA] is set to [MUSIC/PHOTO], press DISPLAY twice.)**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [INTERVAL], then press ⊕.**

The options for [INTERVAL] appear.

3 **Press ↑/↓ to select a setting.**

- [NORMAL]: You can set to the standard duration.
- [FAST]: You can set the duration shorter than [NORMAL].
- [SLOW 1]: You can set the duration longer than [NORMAL].
- [SLOW 2]: You can set the duration longer than [SLOW 1].

4 **Press ⊕.**

Note

• Some JPEG image files may take longer to display than the option you selected. Especially progressive JPEG image files or JPEG image files of 3,000,000 pixels or more.

Selecting an effect for JPEG image files in the slide show

1 **Press DISPLAY. (If [MEDIA] is set to [MUSIC/PHOTO], press DISPLAY twice.)**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [EFFECT], then press ⊕.**

The options for [EFFECT] appear.

3 **Press ↑/↓ to select a setting.**

- [MODE 1]: The JPEG image file sweeps in from top to bottom.
- [MODE 2]: The JPEG image file stretches out from left to right of the TV screen.
- [MODE 3]: The JPEG image file stretches out from the center of the TV screen.
- [MODE 4]: The JPEG image files randomly cycle through the effects.
- [MODE 5]: The next JPEG image file slides over the previous image.
- [OFF]: Off.

4 **Press ⊕.**

Note

- The [EFFECT] setting is not effective when you set [JPEG RESOLUTION] in [HDMI SETUP] to [(1920 × 1080i) HD □] or [(1920 × 1080i) HD] (page 51).

Selecting playback priority of the file type

You can select playback priority when mixed media (MP3 files, JPEG image files, or video files) are in the disc.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Load a DATA CD or DATA DVD.**

After loading the disc, the list of folders appears on the TV screen.

3 **Press DISPLAY.**

The Control Menu display appears on the TV screen.

4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **Press ↑/↓ to select a setting.**

- [MUSIC/PHOTO]: You can play both JPEG image files and MP3 files in the same folder as a slide show.
- [MUSIC]: MP3 file playback has priority.
- [VIDEO]: Video file playback has priority.
- [PHOTO]: JPEG image file playback has priority. You can play JPEG image files as a slide show.

6 **Press ⊕.**

For details of the playback priority of file types under the [MEDIA] setting, see "Playback priority of file types" (page 105).

Displaying a list of MP3 files/ JPEG image files

1 **Press DISPLAY during playback.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [BROWSING], then press ⊕.**

The options for [BROWSING] appear.

3 **Press ↑/↓ to select the desired list, then press ⊕.**

- [FOLDER LIST]: The list of folders appears. Follow Step 6 of "Selecting an MP3 file or folder" (page 39) or "Selecting a JPEG image file or folder" (page 40).
- [PICTURE LIST] (JPEG image files only): Previews of JPEG image files in the folder appear in 16 subscreens. Follow Step 6 of "Selecting a JPEG image file or folder" (page 40).

Enjoying Video Files

DATA-CD DATA DVD

About video files

You can play DivX video files and MPEG4 video files.
DivX® is a video file compression technology, developed by DivX, Inc. This product is an official DivX® Certified product.
You can play a DATA CD or DATA DVD that contains DivX® video files.

A DATA CD or DATA DVD that the system can play

The system only plays a DATA CD of format ISO 9660 Level 1/Level 2 or Joliet, and a DATA DVD of Universal Disk Format (UDF).
Refer to the operating instructions supplied with the disc drives and the recording software (not supplied) for details on the recording format.

About playback order of data on a DATA CD or DATA DVD

Note that the playback order may not be applicable, depending on the software used for creating the video file, or if there are more than 200 folders and 150 video files in each folder.

Note

- The system may not be able to play some DATA CDs/DATA DVDs created in the Packet Write format.

DivX video files that the system can play

The system can play data that is recorded in DivX format, and which has the extension ".avi" or ".divx." The system will not play files with the extension ".avi" or ".divx" if they do not contain a DivX video.

Note

- The system may not play a DivX video file when the file has been combined from two or more DivX video files.
- The system cannot play a DivX video file of size more than 720 (width) × 576 (height) or 2GB.
- Depending on the DivX video file, sound may skip or not match the pictures on the TV screen.
- The system cannot play some DivX video files that are longer than 3 hours.
- Depending on the DivX video file, the picture may pause or be unclear, in which case it is recommended that you create the file at a lower bit rate. If the sound is still noisy, MP3 is the recommended audio format. Note, however, this system does not conform to WMA (Windows Media Audio) format for playing DivX files.
- Because of the compression technology used for DivX video files, it may take some time after you press ▷ for the picture to appear.

MPEG4 video files that the system can play

The system can play data that is recorded in MP4 file format, and which has the extension ".mp4" or ".m4v." The system will not play files with the extension ".mp4" or ".m4v" if they do not contain a MPEG4 video.

Note

- Compatibility with all MPEG4 video encoding/writing software, recording devices, and recording media cannot be guaranteed.

Selecting a folder

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Load a DATA CD or DATA DVD.**

After loading the disc, the list of folders appears on the TV screen.

3 **Press DISPLAY.**

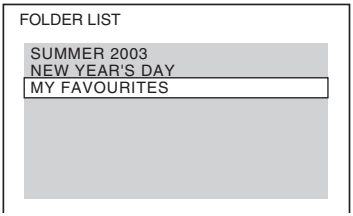
The Control Menu display appears on the TV screen.

4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **When [VIDEO] is selected, press DVD MENU. When other than [VIDEO] is selected, press ↑/↓ to select [VIDEO], then press ⊕.**

A list of folders that contain video files appears.
The selected folder is highlighted in yellow.



6 **Press ↑/↓ to select the folder you want to play.**

7 **Press ▷.**

The system starts playing the selected folder.

To select video files, see "Selecting a video file" (page 44).

To go to the next or previous page

Press →• / •←.

To stop playback

Press ■.

To turn on/off the display

Press DVD MENU.

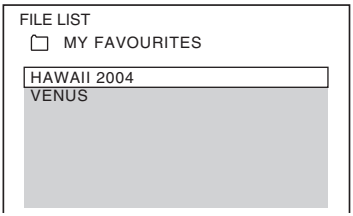
Other operations

See "Other operations" (page 30).

Selecting a video file

1 **After Step 6 of "Selecting a folder," press ⊕.**

The list of files in the folder appears.



2 **Press ↑/↓ to select a file and press ⊕.**

The selected file starts playing.

To go to the next or previous page

Press →• / •←.

To return to the previous display

Press RETURN.

To stop playback

Press ■.

To play the next or previous video file without turning on the above file list

You can select the next or previous video file in the same folder by pressing ▶▶|/|◀◀.
You can also select the first file of the next folder by pressing ▶▶| during playback of the last file of the current folder. Note that you cannot return to the previous folder by pressing |◀◀. To return to the previous folder, select it from the folder list.

Tip

- If the number of viewing times is preset, you can play a DivX video file as many times as the preset number. The following occurrences are counted:
  - when the system is turned off.
  - when another file is played.
  - when the disc tray is opened.

Displaying a list of video files

1 **Press DISPLAY during playback.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [BROWSING], then press ⊕.**

The options for [BROWSING] appear.

3 **Press ↑/↓ to select [FOLDER LIST], then press ⊕.**

The list of folders appears. Follow Step 6 of "Selecting a folder" (page 43).

Adjusting the Delay Between the Picture and Sound

[A/V SYNC]

DVD-V DVD-VR VIDEO CD DATA-CD DATA DVD

When the sound does not match the pictures on the TV screen, you can adjust the delay between the picture and sound.

1 **Press DISPLAY.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [A/V SYNC], then press ⊕.**

The options for [A/V SYNC] appear.

3 **Press ↑/↓ to select a setting.**

- [OFF]: Off.
- [ON]: You can adjust the delay between picture and sound.

4 **Press ⊕.**

Note

- Depending on the input stream, [A/V SYNC] may not be effective.

Restricting Playback of the Disc

[PARENTAL CONTROL]

DVD-V

The [PARENTAL CONTROL] function allows you to restrict playback of DVDs that have ratings. Scenes may be blocked or replaced with different scenes.
You can set the playback restriction by registering a password. When you set the [PARENTAL CONTROL] function to on, you need to enter the password to play restricted discs.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

The Setup Display appears.

5 **Press ↑/↓ to select [SYSTEM SETUP], then press ⊕.**

The options for [SYSTEM SETUP] appear.

6 **Press ↑/↓ to select [PARENTAL CONTROL →], then press ⊕.**

■ If you have not entered a password

The display for registering a new password appears.

Enter a 4-digit password using the number buttons, then press ⊕.

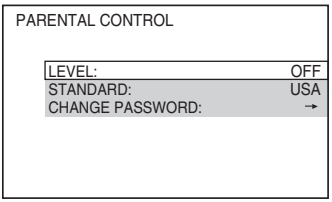
The display for confirming the password appears.

■ When you have already registered a password

The display for entering the password appears.

7 Enter or re-enter your 4-digit password using the number buttons, then press ⊕.

The display for setting the playback limitation level appears.



8 Press ↑/↓ to select [STANDARD], then press ⊕.

The selection items for [STANDARD] are displayed.

9 Press ↑/↓ to select a geographic area as the playback limitation level, then press ⊕.

The area is selected.

When you select [OTHERS →], select and enter a standard code from "Parental Control Area Code List" (page 106) using the number buttons.

10 Press ↑/↓ to select [LEVEL], then press ⊕.

The selection items for [LEVEL] are displayed.

11 Press ↑/↓ to select the desired level, then press ⊕.

[PARENTAL CONTROL] setting is complete.

The lower the value, the stricter the limitation.

To turn off the [PARENTAL CONTROL] function

Set [LEVEL] to [OFF] in Step 11.

To play a disc for which [PARENTAL CONTROL] is set

1 Load the disc and press ▷.

The display for entering your password appears.

2 Enter your 4-digit password using the number buttons, then press ⊕.

The system starts playback.

Tip

- If you forget your password, remove the disc and repeat Steps 1 to 6 of "Restricting Playback of the Disc" (page 45). When you are asked to enter your password, enter "199703" using the number buttons, then press ⊕. The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password, replace the disc in the unit and press ▷. When the display for entering your password appears, enter your new password.

Changing the password

1 Press FUNCTION repeatedly until "DVD" appears in the front panel display.

2 Press DISPLAY while the system is in stop mode.

The Control Menu display appears on the TV screen.

3 Press ↑/↓ to select [SETUP], then press ⊕.

The options for [SETUP] appear.

4 Press ↑/↓ to select [CUSTOM], then press ⊕.

The Setup Display appears.

5 Press ↑/↓ to select [SYSTEM SETUP], then press ⊕.

The options for [SYSTEM SETUP] appear.

6 Press ↑/↓ to select [PARENTAL CONTROL →], then press ⊕.

The display for entering the password appears.

7 **Enter your 4-digit password using the number buttons, then press ⊕.**

8 **Press ↑/↓ to select [CHANGE PASSWORD →], then press ⊕.**

9 **Enter a new 4-digit password using the number buttons, then press ⊕.**

10 **To confirm your password, re-enter it using the number buttons, then press ⊕.**

If you make a mistake entering your password

Press ← before you press ⊕, then input the correct number.

Changing the System Settings by Using the Setup Display

You can make various adjustments to items such as picture and sound.
Displayed items vary depending on the area.

Note

- Playback settings stored in the disc take priority over the Setup Display settings and not all the functions described may work.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

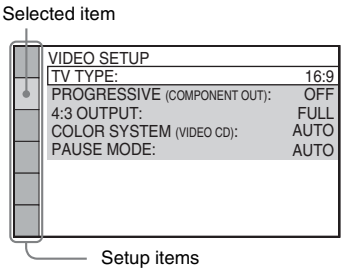
4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

The Setup Display appears.

5 **Press ↑/↓ to select the setup item, then press ⊕.**

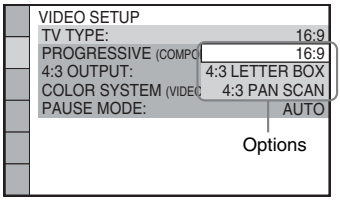
- [LANGUAGE SETUP] (page 48)
- [VIDEO SETUP] (page 48)
- [HDMI SETUP] (page 50)
- [AUDIO SETUP] (page 51)
- [SYSTEM SETUP] (page 52)
- [SPEAKER SETUP] (page 53)

Example: [VIDEO SETUP]



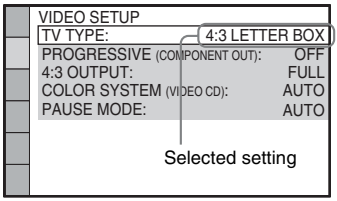
6 **Press ↑/↓ to select an item, then press ⊕.**

The options for the selected item appear.
Example: [TV TYPE]



7 **Press ↑/↓ to select a setting, then press ⊕.**

The setting is selected and setup is complete.
Example: [4:3 LETTER BOX]



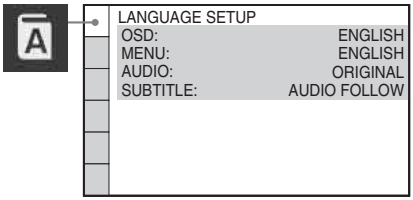
To reset all of the [SETUP] settings

To reset all of the [SETUP] settings, see "Returning the [SETUP] settings to the default" (page 88).

Setting the display or sound track language

[LANGUAGE SETUP]

Set various languages for the on-screen display or sound track.



■ [OSD] (On-Screen Display)

You can switch the display language on the TV screen.

■ [MENU] (DVD VIDEO only)

You can switch the language for the disc's menu.

■ [AUDIO] (DVD VIDEO only)

You can switch the language of the sound track. When you select [ORIGINAL], the language given priority on the disc is selected.

■ [SUBTITLE] (DVD VIDEO only)

You can switch the language of the subtitles recorded on the DVD VIDEO.
When you select [AUDIO FOLLOW], the language for the subtitles changes according to the language you selected for the sound track.

Note

- When you select a language in [MENU], [AUDIO], or [SUBTITLE] that is not recorded on the DVD VIDEO, one of the recorded languages will be automatically selected (depending on the disc, the language may not be selected automatically).

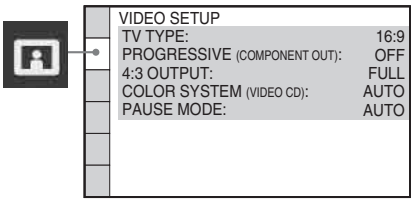
Tip

- If you select [OTHERS →] in [MENU], [AUDIO], and [SUBTITLE], select and enter a language code from "Language Code List" (page 106) using the number buttons.

Settings for the display

[VIDEO SETUP]

Select settings according to the TV to be connected.



■ [TV TYPE]

You can select the aspect ratio of the connected TV.

[16:9]: Select this when you connect a wide-screen TV or a TV with a wide mode function.

[4:3 LETTER BOX]: Select this when you connect a 4:3 standard TV. The system displays a wide picture with bands on the upper and lower portions of the TV screen.

[4:3 PAN SCAN]: Select this when you connect a 4:3 standard TV. The system automatically displays a wide picture on the entire screen and cuts off the portions that do not fit.

Note

- Depending on the DVD, [4:3 LETTER BOX] may be selected automatically instead of [4:3 PAN SCAN] or vice versa.

■ [PROGRESSIVE (COMPONENT OUT)]

You can set the progressive signal that is output from the COMPONENT VIDEO OUT jacks to on/off. For details, see “Does your TV accept progressive signals?” (page 24).

[OFF]: The system outputs interlace signals.
[ON]: The system outputs progressive signals.
When you select [ON], follow the Steps below.

1 Select [ON], then press ⊕.

The confirmation display appears.

2 Press ←/→ to select [START], then press ⊕.

The system outputs a progressive signal for 5 seconds. Check that the screen is displayed correctly.

3 Press ←/→ to select [YES], then press ⊕.

The system outputs a progressive signal. If you select [NO], the system will not output a progressive signal.

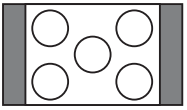
Note

- [PROGRESSIVE (COMPONENT OUT)] is effective only when you connect the unit and TV with a component video cable (page 15).

■ [4:3 OUTPUT]

When you use a 16:9 aspect ratio TV, you can adjust the aspect ratio to watch 4:3 aspect ratio signals. If you can change the aspect ratio on your TV, change the setting on your TV, not the system.

[FULL]: Select this when you can change the aspect ratio on your TV.
[NORMAL]: Select this when you cannot change the aspect ratio on your TV. A 16:9 aspect ratio signal with black bands on left and right sides of the image appears.



16:9 aspect ratio TV

Note

- [4:3 OUTPUT] is effective only when you set [TV TYPE] in [VIDEO SETUP] to [16:9].

■ [COLOR SYSTEM (VIDEO CD)]

(Asian, Australian, Middle Eastern, and South African models only)

You can select the color system when you play a VIDEO CD.

[AUTO]: The system outputs the disc’s video signal, either PAL or NTSC. If your TV uses a DUAL system, select [AUTO].
[PAL]: The system changes the video signal of an NTSC disc and outputs it in the PAL system.
[NTSC]: The system changes the video signal of a PAL disc and outputs it in the NTSC system.

Note

- You cannot change the color system of the disc itself.
- You can change the color system of this system according to the connected TV (page 15).

■ [BLACK LEVEL]

(North American, Mexican, and Latin American models only)

You can select the black level (setup level) for the video signals output from the jacks other than COMPONENT VIDEO OUT/HDMI OUT.

[ON]: The standard level.
[OFF]: You can lower the standard black level. Use this when the picture becomes too white.

■ [BLACK LEVEL (COMPONENT OUT)]

(North American, Mexican, and Latin American models only)

You can select the black level (setup level) for the video signals output from the COMPONENT VIDEO OUT jacks.
You cannot select this and the setting is not effective when the system outputs a progressive signal.

[OFF]: You can set the black level of the output signal to the standard level.
[ON]: You can raise the standard black level. Use this when the picture becomes too black.

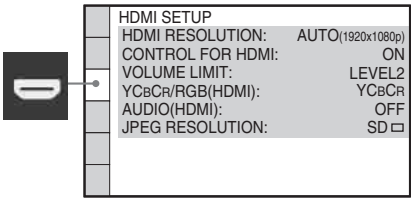
■ [PAUSE MODE] (DVD VIDEO/DVD-R/DVD-RW only)

You can select the picture in pause mode.

[AUTO]: The picture, including subjects that move dynamically, is output with no jitter. This setting is for normal usage.
[FRAME]: The picture, including subjects that do not move dynamically, is output in high resolution.

Settings for HDMI

[HDMI SETUP]



■ [HDMI RESOLUTION]

You can select the type of video signal that is output from the HDMI OUT jack. For details, see “To select the type of video signal output from the HDMI OUT jack” (page 24).

[AUTO (1920 × 1080p)]: The system outputs the optimal video signal for the connected TV.
[1920 × 1080i]: The system outputs 1920 × 1080i* video signals.
[1280 × 720p]: The system outputs 1280 × 720p* video signals.
[720 × 480p]**: The system outputs 720 × 480p* video signals.

* i: interlace, p: progressive
** Depending on the area, [720 × 480/576p] may appear.

■ [CONTROL FOR HDMI]

You can set the [CONTROL FOR HDMI] function to on/off. This function is available when you connect the system and TV with an HDMI cable. For details, see “Using the Control for HDMI Function for “BRAVIA” Sync” (page 59).

[ON]: On. You can operate mutually between components that are connected with an HDMI cable.
[OFF]: Off.

■ [VOLUME LIMIT]

If you change the output method of the TV to the system speakers via the TV menu (or by pressing THEATRE), the System Audio Control

(page 60) is activated and loud sound may be output depending on the volume level of the system. You can prevent this by limiting the maximum level of the volume.

[LEVEL3]: Maximum volume level is set to 10.
[LEVEL2]: Maximum volume level is set to 15.
[LEVEL1]: Maximum volume level is set to 20.
[OFF]: Off.

Note

- This function is available only when [CONTROL FOR HDMI] is set to [ON].

■ [YCBCR/RGB (HDMI)]

You can select the type of HDMI signal output from the HDMI OUT jack.

[YCBCR]: The system outputs YCBCR signals.
[RGB]: The system outputs RGB signals.

Note

- If the playback picture becomes distorted, set [YCBCR] to [RGB].
- If the HDMI OUT jack is connected to a component with a DVI jack, [RGB] signals will be automatically output even when you select [YCBCR].

■ [AUDIO (HDMI)]

You can select the audio output status from the HDMI OUT jack.

[OFF]: The system does not output sound from the HDMI OUT jack.
[ON]: The system outputs audio signals by converting Dolby Digital, DTS, or 96 kHz/24-bit PCM signals to 48 kHz/16-bit PCM.

Note

- When you connect the unit and TV with an HDMI cable and [ON] is selected, [AUDIO DRC], [A/V SYNC], DYNAMIC BASS, "DEC. MODE," and sound mode are not applied to the sound that is output from the TV.
- When you set the function to other than "DVD" or "USB," the system does not output the sound from the HDMI OUT jack even if you set [AUDIO (HDMI)] to [ON].

■ [JPEG RESOLUTION]

You can select the resolution of JPEG image files output from the HDMI OUT jack.

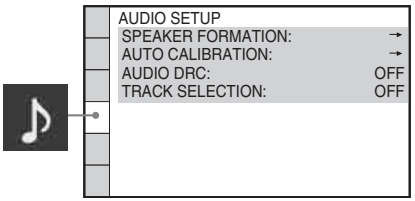
[SD □]: The system outputs standard resolution with a black frame.
[HD □]: The system outputs HD resolution with a black frame.
[HD]: The system outputs the HD resolution without a black frame.
[(1920 × 1080i) HD □]: The system outputs full size HD resolution with a black frame.
[(1920 × 1080i) HD]: The system outputs full size HD resolution without a black frame.

Note

- [JPEG RESOLUTION] is effective only when you set [TV TYPE] in [VIDEO SETUP] to [16:9], and you set [HDMI RESOLUTION] in [HDMI SETUP] to other than [720 × 480p] or [720 × 480/576p].
- You can select [(1920 × 1080i) HD □] or [(1920 × 1080i) HD] only when you set [HDMI RESOLUTION] in [HDMI SETUP] to [1920 × 1080i].
- The HDMI signal will stop momentarily when:
  - the system is loading or unloading a DATA CD or DATA DVD.
  - you connect or remove a USB device.

Settings for the audio

[AUDIO SETUP]



■ [SPEAKER FORMATION]

You can select the position of the speakers for better surround sound. For details, see "Getting Optimal Surround Sound for a Room" (page 75).

■ [AUTO CALIBRATION]

You can calibrate the appropriate settings automatically. For details, see "Calibrating the Appropriate Settings Automatically" (page 76).

■ [AUDIO DRC] (DVD VIDEO only)

You can compress the dynamic range of the sound track. [AUDIO DRC] is useful for watching movies at low volume late at night.

[OFF]: No compression of dynamic range.
[STANDARD]: The system reproduces the sound track with the kind of dynamic range that the recording engineer intended.
[MAX]: The system compresses dynamic range fully.

Note

• [AUDIO DRC] works only for Dolby Digital.

■ [TRACK SELECTION] (DVD VIDEO only)

You can give the sound track which contains the highest number of channels priority when you play a DVD VIDEO on which multiple audio formats (PCM, DTS, Dolby Digital, or MPEG audio) are recorded.

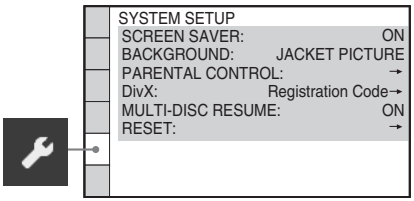
[OFF]: Off.
[AUTO]: The system selects the sound track automatically according to the priority.

Note

• When you set the item to [AUTO], the language may change. The [TRACK SELECTION] setting has higher priority than the [AUDIO] settings in [LANGUAGE SETUP] (page 48). (Depending on the disc, this function may not work.)
• If PCM, DTS, Dolby Digital sound, and MPEG audio have the same number of channels, the system selects PCM, DTS, Dolby Digital sound, and MPEG audio in this order.

Other Settings

[SYSTEM SETUP]



■ [SCREEN SAVER]

You can reduce the damage to the display device (ghosting). Press any button (e.g., ▷) to cancel the screen saver.

[ON]: The screen saver image appears if you do not operate the system for about 15 minutes.
[OFF]: Off.

■ [BACKGROUND]

You can select the background color or picture on the TV screen.

[JACKET PICTURE]: The jacket picture (still picture) appears, but only when the jacket picture is already recorded on the disc (CD-EXTRA, etc.). If the disc does not contain a jacket picture, the [GRAPHICS] picture appears.
[GRAPHICS]: A preset picture stored in the system appears.
[BLUE]: The background is blue.
[BLACK]: The background is black.

■ [PARENTAL CONTROL]

You can set the playback restrictions. For details, see “Restricting Playback of the Disc” (page 45).

■ [DivX]

You can display the registration code for this system.
For more information, go to http://www.divx.com on the Internet.

■ [MULTI-DISC RESUME] (DVD VIDEO/ VIDEO CD only)

You can set the [MULTI-DISC RESUME] function to on/off.

[ON]: The system stores the resume points in memory for up to 10 discs.
[OFF]: The system does not store the resume points in memory. Playback restarts at the resume point only for the current disc in the unit.

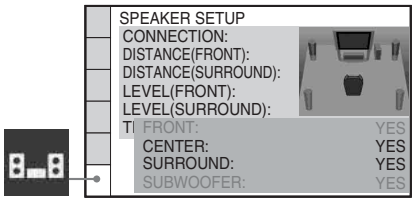
■ [RESET]

You can return the [SET UP] settings other than [PARENTAL CONTROL] to the default settings. For details, see “Returning the [SETUP] settings to the default” (page 88).

Settings for the speakers

[SPEAKER SETUP]

To obtain the best possible surround sound, set connection of the speakers and their distance from your listening position. Then use the test tone to adjust the level and the balance of the speakers to the same level.



■ [CONNECTION]

If you do not connect center or surround speakers, set the parameters for [CENTER] and [SURROUND]. Since the front speaker and subwoofer settings are fixed, you cannot change them.

[FRONT]

[YES]

[CENTER]

[YES]: Normally select this.
[NONE]: Select this if no center speaker is used.

[SURROUND]

[YES]: Normally select this.
[NONE]: Select this if no surround speakers are used.

[SUBWOOFER]

[YES]

Note

- When you change the [CONNECTION] setting, the [ALL FRONT] of [SPEAKER FORMATION] setting remains the same, but the other settings of [SPEAKER FORMATION] return to [ALL FRONT].

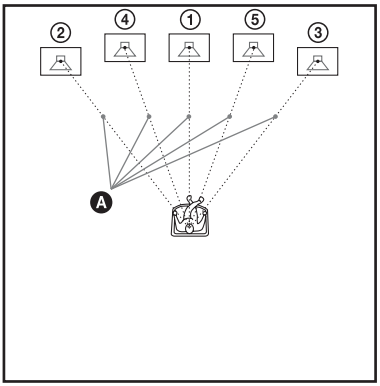
■ [DISTANCE (FRONT)]

When you move the front speakers, center speaker, and subwoofers, be sure to set the parameters of the distance (Ⓐ) from the listening position to the speakers.
You can set the parameters from 0.00 to 7.00 meters[1)] (0 to 23 ft).

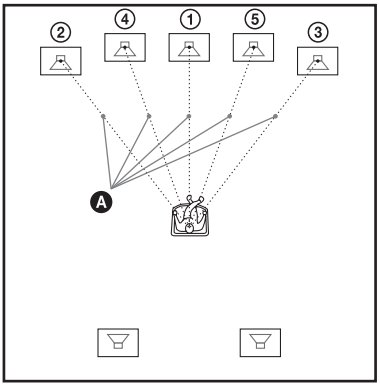
The speakers in the illustration correspond to the following:

① Center speaker
② Front speakers (L)
③ Front speakers (R)
④ Subwoofer (L)
⑤ Subwoofer (R)

When you set [ALL FRONT] in the [SPEAKER FORMATION] setting



When you set [STANDARD] in the [SPEAKER FORMATION] setting



[L/R] 3.00 m/10 ft[2)3)5)]: Set the front speaker distance.
[CENTER] 3.00 m/10 ft[2)3)4)]: Set the center speaker distance.
[SUBWOOFER] 3.00 m/10 ft[2)3)5)]: Set the subwoofer distance.

[1)]0.00 to 7.01 meters for North American models.

[2)]When you perform the Quick Setup (page 22), the default settings are changed.

[3)]3.04 m/10 ft for North American models.

[4)]This item appears when you set [CENTER] to [YES] in the [CONNECTION] setting.

[5)]The [L], [R], and [SUBWOOFER] settings affect both respective speakers.

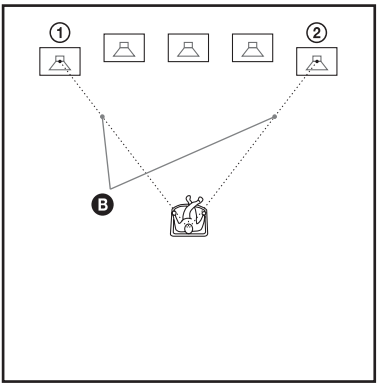
■ [DISTANCE (SURROUND)]

When you move the surround speakers, be sure to set the parameters of the distance (Ⓑ) from the listening position to the speakers.
You can set the parameters from 0.00 to 7.00 meters[1)] (0 to 23 ft).

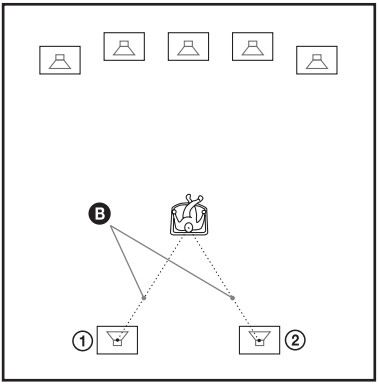
The speakers in the illustration correspond to the following:

①Surround speaker (L)
②Surround speaker (R)

When you set [ALL FRONT] in the [SPEAKER FORMATION] setting



When you set [STANDARD] in the [SPEAKER FORMATION] setting



[L/R] 3.00 m/10 ft[2)3)4)]: Set the surround speaker distance.

[1)]0.00 to 7.01 meters for North American models.

[2)]When you perform the Quick Setup (page 22), the default settings are changed.

[3)]3.04 m/10 ft for North American models.

[4)]This item appears when you set [SURROUND] to [YES] in the [CONNECTION] setting.

Note

- Depending on the input stream, the [DISTANCE] setting may not be effective.
- When the speaker distance setting is not in the recommended range, ⚠↑/⚠↓ ** m is displayed (** being the number). ⚠↑ indicates over the recommended distance. ⚠↓ indicates below.

■ [LEVEL (FRONT)]

You can adjust the sound level of the front speakers, center speaker, and subwoofer. You can set the parameters from –6.0 dB to +6.0 dB. Be sure to set [TEST TONE] to [ON] for easy adjustment.

[L/R] 0.0 dB: Set the front speaker level.
[CENTER] 0.0 dB*: Set the center speaker level.
[SUBWOOFER] +2.0 dB: Set the subwoofer level.

* This item appears when you set [CENTER] to [YES] in the [CONNECTION] setting.

■ [LEVEL (SURROUND)]

You can adjust the sound level of the surround speakers. You can set the parameter from –6.0 dB to +6.0 dB. Be sure to set [TEST TONE] to [ON] for easy adjustment.

[L/R] 0.0 dB*: Set the surround speaker level.

* This item appears when you set [SURROUND] to [YES] in the [CONNECTION] setting.

■ [TEST TONE]

The speakers will emit a test tone to adjust [LEVEL (FRONT)] and [LEVEL (SURROUND)].

[OFF]: The test tone is not emitted from the speakers.
[ON]: The test tone is emitted from each speaker in sequence while adjusting the level. When you select one of the [SPEAKER SETUP] items, the test tone is emitted from each speaker in sequence.
Adjust the sound level as follows.

1 Set the [TEST TONE] to [ON].

2 Press ←/↑/↓/→ repeatedly to select the desired speaker and the level.

3 Press ⊕.

4 Repeat Steps 1 to 3.

5 Press ←/↑/↓/→ repeatedly to set [TEST TONE] to [OFF] after adjusting the speaker level.

Note

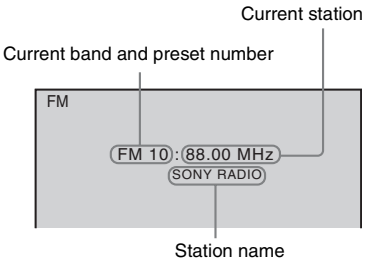
- You cannot perform [TEST TONE] during karaoke mode.

Tip

- To adjust the volume of all the speakers at one time, turn the VOLUME control on the unit, or press VOLUME +/– on the remote.
- To return to the default setting when changing a setting, select the item, then press CLEAR. Note that only the [CONNECTION] setting does not return to the default setting.

Presetting Radio Stations

You can preset 20 FM stations. Before tuning, make sure to turn down the volume to minimum.



1 **Press FUNCTION repeatedly until "TUNER FM" appears in the front panel display.**

2 **Press and hold TUNING +/– until the auto scanning starts.**

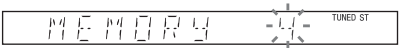
Scanning stops when the system tunes in a station. "TUNED" and "ST" (stereo program) appear in the front panel display.

3 **Press SYSTEM MENU.**

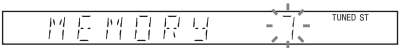
4 **Press ↑/↓ repeatedly until "MEMORY" appears in the front panel display.**

5 **Press ⊕ or →.**

A preset number appears in the front panel display.



6 **Press ↑/↓ to select the preset number you want.**



Tip

• You can select the preset number directly by pressing the number buttons.

7 **Press ⊕.**

"COMPLETE" appears in the front panel display, and the station is stored.

8 **Repeat Steps 2 to 7 to store other stations.**

9 **Press SYSTEM MENU.**

The system menu turns off.

To change the preset number

Select the desired preset number by pressing PRESET +/– (page 57), then perform the procedure from Step 3.

Listening to the Radio

Preset radio stations in the system's memory first (see "Presetting Radio Stations" (page 56)).

1 **Press FUNCTION repeatedly until "TUNER FM" appears in the front panel display.**

The last received station is tuned in.

2 **Press PRESET +/– repeatedly to select the preset station.**

Each time you press the button, the system tunes in one preset station.

Tip

• You can select the preset station number directly by pressing the number buttons.

3 **Adjust the volume by pressing VOLUME +/–.**

To turn off the radio

Press I/⏻.

To listen to non-preset radio stations

Use manual or automatic tuning in Step 2.
For manual tuning, press TUNING +/– repeatedly.
For automatic tuning, press and hold TUNING +/–. The automatic tuning stops automatically when the system receives the radio station. To stop the automatic tuning manually, press TUNING +/– or ■.

To listen to radio stations when you know the frequencies

Press D.TUNING in Step 2, press the number buttons to select the frequencies, then press ⊕.

Tip

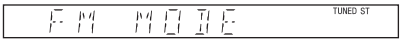
• To improve reception, reorient the connected antennas (aerials).

If an FM program is noisy

If an FM program is noisy, you can select monaural reception. There will be no stereo effect, but reception will improve.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "FM MODE" appears in the front panel display.**



3 **Press ⊕ or →.**

4 **Press ↑/↓ to select "MONO."**

• "STEREO": Stereo reception.
• "MONO": Monaural reception.

5 **Press ⊕.**

The setting is made.

6 **Press SYSTEM MENU.**

The system menu turns off.

Naming preset stations

You can enter a name for preset stations. These names (for example, "ABC") appear in the front panel display when a station is selected.
Only one name can be entered for each preset station.

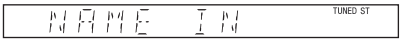
1 **Press FUNCTION repeatedly until "TUNER FM" appears in the front panel display.**

The last received station is tuned in.

2 **Press PRESET +/– repeatedly to select the preset station you want to create an index name for.**

3 **Press SYSTEM MENU.**

4 **Press ↑/↓ repeatedly until "NAME IN" appears in the front panel display.**



5 **Press ⊕ or →.**

6 **Create a name by using ←/↑/↓/→.**

Press ↑/↓ to select a character, then press → to move the cursor to the next position.

You can input letters, numbers, and other symbols for a radio station.

If you make a mistake

Press ←/→ repeatedly until the character to be changed flashes, then press ↑/↓ to select the desired character.

To erase the character, press ←/→ repeatedly until the character to be erased flashes, then press CLEAR.

7 **Press ⊕.**

"COMPLETE" appears in the front panel display, and the station name is stored.

8 **Press SYSTEM MENU.**

The system menu turns off.

Viewing the station name or frequency in the front panel display

When the system is set to "TUNER FM," you can check the frequency using the front panel display.

Press DISPLAY.

Each time you press DISPLAY, the display changes:

① → ② → .... → ① → ....

When the station name is set

① Station name
Ex. "SONY RADIO"

② Frequency
Ex. "FM1 87.50"

③ The "FM MODE" setting
Ex. "STEREO"

When the station name is not set

① Frequency
Ex. "FM1 87.50"

② The "FM MODE" setting
Ex. "STEREO"

Using the Control for HDMI Function for "BRAVIA" Sync

This function is available on TVs with the "BRAVIA" Sync function only.
By connecting Sony components that are compatible with the Control for HDMI function with an HDMI cable, operation is simplified as below:

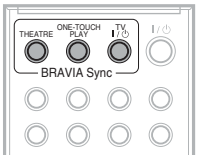
– Theatre Mode (page 60)
– One-Touch Play (page 60)
– System Power Off (page 60)
– System Audio Control (page 60)
– Volume Limit (page 61)
– Language Follow (page 61)

Control for HDMI is a mutual control function standard used by CEC (Consumer Electronics Control) for HDMI (High-Definition Multimedia Interface).

The Control for HDMI function will not work in the following cases:

– When you connect this system to a component which is not compatible with the Control for HDMI function.
– A component does not have an HDMI jack.

There are convenient buttons on the system's remote for operating the TV, such as THEATRE, ONE-TOUCH PLAY, TV I/⏻. For details, see "Controlling the TV with the Supplied Remote" (page 77) and refer to the operating instructions of the TV.



Note

- Depending on the connected component, the Control for HDMI function may not work. Refer to the operating instructions supplied with the component.
- The Control for HDMI function may not work if you connect a component other than a Sony component, even if the component is compatible with the Control for HDMI function.

Preparing the Control for HDMI function

(Control for HDMI - Easy Setting)

The system is compatible with the Control for HDMI - Easy Setting function. If the TV is compatible with the Control for HDMI - Easy Setting function, you can set the system's [CONTROL FOR HDMI] function automatically by setting the TV. For details, refer to the operating instructions of the TV.

If the TV is not compatible with the Control for HDMI - Easy Setting function, set the Control for HDMI function of the system and TV manually.

1 Make sure that the system and the TV are connected with an HDMI cable.

2 Turn on the TV and press I/⏻ to turn on the system.

3 Switch the input selector on your TV so that the signal from the system through the HDMI input appears on the TV screen.

4 Set the Control for HDMI function of the system and TV.

For details of the system settings, see the following Steps. For details of the setting of the TV, refer to the operating instructions of the TV (depending on the TV, the default setting of the Control for HDMI function may be set to off).

To set the [CONTROL FOR HDMI] function to on/off

1 Press FUNCTION repeatedly until "DVD" appears in the front panel display.

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

The Setup Display appears.

5 **Press ↑/↓ to select [HDMI SETUP], then press ⊕.**

The options for [HDMI SETUP] appear.

6 **Press ↑/↓ to select [CONTROL FOR HDMI], then press ⊕.**

7 **Press ↑/↓ to select the setting, then press ⊕.**

- [ON]: On.
- [OFF]: Off.

Using the Theatre Mode

(Theatre Mode)

If your TV is compatible with the Theatre Mode, you can enjoy optimal image and sound quality suited for movies, and sound is output from the system's speakers automatically by pressing THEATRE.

Watching a DVD by a single button press

(One-Touch Play)

By only pressing ONE-TOUCH PLAY, the TV turns on, the TV is set for DVD input mode, and the system starts playing a disc automatically.

Note

- One-Touch Play does not work when you press ▷.

The system and TV work as follows (e.g.):

This system	TV
Turns on. (If not already turned on.)	Turns on. (If not already turned on.)
↓	↓
Switches to "DVD" function.	Switches to HDMI input.
↓	↓
Starts playing the disc and outputs the sound.	Minimizes sound level. (System Audio Control)

Turning the system off in sync with the TV

(System Power Off)

When you turn the TV off by using the POWER button on the TV's remote or TV I/⏻ on the system's remote, the system turns off automatically.

Note

- Before using the System Power Off function, set the function for TV power. For details, refer to the operating instructions of the TV.
- Depending on the status of the system (ex. while using other than "DVD," "TV," or "USB" functions, or playing a CD), the system may not turn off automatically.

Enjoying TV sound from the speakers by this system

(System Audio Control)

You can enjoy TV sound via this system easily. To use this function, connect the system and the TV with an audio cord and an HDMI cable (pages 15, 17).

Depending on the TV, when you set the system to the "TV" function, the System Audio Control function is activated. TV sound is output from the system speakers, and the volume of the TV speakers is minimized automatically.

You can use the System Audio Control function as follows:

- While you are watching the TV and the function of the system is switched to "TV," TV

sound is output from the system speakers automatically.

- While you are watching the TV and the function of the system is switched to "DVD" or "USB," sound of the selected system function is output from the system speakers; TV sound is not output via the TV speakers.
- You can control the system's volume by the remote of the TV.
- If you turn the system off or set the function of the system to other than "TV," "DVD," or "USB," TV sound is output from the TV speakers.

You can also operate the System Audio Control function via the TV menu. For details, refer to the operating instructions of the TV.

Note

- While the TV is in PAP (picture and picture) mode, the System Audio Control function will not work. When the TV exits PAP mode, the output method of the TV returns to the one before PAP mode.
- While transferring songs on an audio CD onto a USB device, the System Audio Control function will not work.

Tip

- You can connect the system and the TV audio digitally. For details, see page 17.

Setting the Maximum Volume Level of the System

(Volume Limit)

If you change the output method of the TV to the system speakers via the TV menu (or by pressing THEATRE), loud sound may be output depending on the volume level of the system. You can prevent this by limiting the maximum level of the volume. For details, see "[VOLUME LIMIT]" (page 50).

Changing the language for the on-screen display of the TV

(Language Follow)

When you change the language for the on-screen display of the TV, the system's on-screen display language is also changed. However, when the system's on-screen display is displayed, this function does not work.

Playing Back Files of a USB Device

You can play audio files (MP3/WMA/AAC files)/JPEG image files/video files (DivX/MPEG4 video files) stored in a USB device such as the digital music player or USB storage media (not supplied) by connecting the USB device to the unit.
For a list of USB devices that can be connected to the unit, see “Playable USB Devices” (supplement).
The audio formats that can be played back by the system are MP3/WMA/AAC files* only.

* Files with copyright protection (Digital Rights Management) cannot be played by the system.

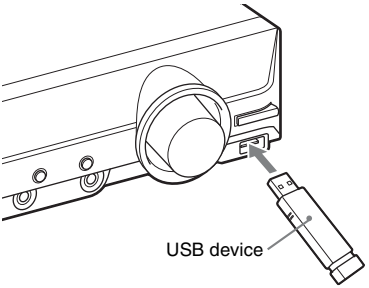
Note

• The system cannot play WMA/AAC files on a DATA CD/DATA DVD.

About playable USB devices

• Do not use USB devices other than these USB devices. Operation of models not listed here is not guaranteed.
• Operation may not always be ensured even when using these USB devices.
• Some of these USB devices may not be available for purchase in certain areas.
• During playback or transferring of files, there is a small possibility that these operations may be stopped due to excess static buildup in the system or the USB device. In this case, remove the USB device and reconnect it, then retry the operation from the beginning.
• When formatting a USB device, be sure to do so using the device itself, or dedicated formatting software for the device. Otherwise, you may be unable to properly transfer from the USB device to this system.
• Some files supported by the Walkman® are not supported by this system.
• When connecting a Walkman® to the system, be sure to connect after the display “Creating Library” or “Creating Database” on the Walkman® has disappeared.
• When transferring music to a Walkman® using “Media Manager for WALKMAN,” be sure to transfer in MP3 format. For details, refer to the operating manual supplied with the Walkman®.

Connecting the USB device



1 Press FUNCTION repeatedly until “USB” appears in the front panel display.

2 Connect a USB device (digital music player or USB storage media) to the ⇧ (USB) port.

When you connect the USB device, “READING” appears in the front panel display until the system reads all data of the USB device.

Note

• Do not forcibly insert the USB device, as this may cause the device to be damaged.
• Do not connect any devices or objects other than a USB device.
• It may take about 10 seconds before “READING” appears in the front panel display depending on the type of the USB device.

To remove the USB device

1 Press ■ to stop playback.

2 Press I/⏻ to turn off the system.

3 Remove the USB device.

Notes on the USB device

• The system can play back up to 200 folders, including albums (folders) that do not contain audio files and JPEG image files. When more than 200 folders are in the USB device, folders that are recognized by the system differ depending on the folder configuration.

• The system can play back the following files.

File	Extension of the file
MP3 file	".mp3"
WMA file	".wma"
AAC file	".m4a"
JPEG image file	".jpg" or ".jpeg"
DivX video file	".avi" or ".divx"
MPEG4 video file	".mp4" or ".m4v"

The system will play back any data with the extension above, even if it is not MP3/WMA/AAC/JPEG/DivX/MPEG4 format. Playing this data may generate a loud noise which could damage your speaker system.

- The following USB devices/situations can increase the time it takes to start playback:
  - a USB device recorded with a complicated tree structure.
  - when the audio files, JPEG image files, or video files in another folder have just been played back.
- Some USB devices cannot be played back on the system depending on the file format.
- The system can play back to a depth of 8 folders only.
- The system may not be able to play an audio file, JPEG image file, or video file depending on the file type.
- When the USB device is inserted, the system reads all the files on the USB device. If there are many folders or files on the USB device, it may take a long time to finish reading the USB device.
- Do not connect the system and the USB device through a USB hub.
- With some connected USB devices, after an operation is performed, there may be a delay before it is performed by this system.
- This system does not necessarily support all the functions provided in a connected USB device.
- Files recorded by a device such as a computer may not be played back in the order in which they were recorded.
- The playback order for the system may differ from the playback order of the connected USB device.
- Always turn off the system before removing the USB device. Removing the USB device while the system is on may corrupt the data on the USB device.
- Do not save other types of files or unnecessary folders on a USB device that has audio files, JPEG image files, or video files.
- Folders that have no audio files, JPEG image files, or video files are skipped.
- Compatibility with all MP3/WMA/AAC encoding/writing software, recording devices, and recording media cannot be guaranteed. An incompatible USB device may produce noise or interrupted audio or may not play at all.
- Compatibility with all MPEG4 video encoding/writing software, recording devices, and recording media cannot be guaranteed.
- Before using the USB device, make sure that no virus-ridden files are on the USB device.

Selecting an audio file or folder

1 **Press FUNCTION repeatedly until "USB" appears in the front panel display.**

2 **Connect a USB device to the ⇜ (USB) port.**

After reading all data of the USB device, the list of folders appears on the TV screen.

3 **Press DISPLAY.**

The Control Menu display appears on the TV screen.

4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **When [MUSIC] is selected, press DVD MENU. When other than [MUSIC] is selected, press ↑/↓ to select [MUSIC], then press ⊕.**

A list of folders that contain audio files appears.

The selected folder is highlighted in yellow.

FOLDER LIST
01 Let's Talk About Love (1985)
02 1st Album (1986)
03 In the Middle of Nowhere (1986)
04 Ready for Romance (1986)
05 In the Garden of Venus (1987)
06 Romantic Warriors (1987)
07 Back for Good (1988)
08 Alone (1999)

6 **Press ↑/↓ to select a folder.**

■ To play audio files in a folder

Press ▷ to start playing the selected folder.

■ To select an audio file

Press ⊕.

The list of files contained in the folder appears.

Press ↑/↓ to select a file and press ⊕.

The system starts playing the selected file. You can turn the file list off by pressing DVD MENU. Pressing DVD MENU again will display the folder list.

Tip

• The system can recognize up to 150 audio files in a single folder.

To go to the next or previous page

Press •→ / ←•.

To stop playback

Press ■.

To play the next or previous audio file

Press ▶▶| to play the next audio file. Press |◀◀ twice to play the previous audio file.

When you press |◀◀ once, you can go to the beginning of the current audio file.

Note that you can select the next folder by continuing to press ▶▶| after the last file on the current folder, but that you cannot return to the previous folder by pressing |◀◀. To return to the previous folder, select the folder from the folder list.

To return to the previous display

Press ↩ RETURN.

To turn on/off the display

Press DVD MENU.

Other operations

See "Other operations" (page 30).

Selecting a JPEG image file or folder

1 **Press FUNCTION repeatedly until "USB" appears in the front panel display.**

2 **Connect a USB device to the ⇜ (USB) port.**

After reading all data of the USB device, the list of folders appears on the TV screen.

3 **Press ▭ DISPLAY.**

The Control Menu display appears on the TV screen.

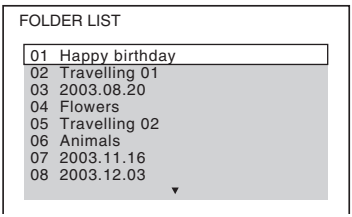
4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **When [PHOTO] is selected, press DVD MENU. When other than [PHOTO] is selected, press ↑/↓ to select [PHOTO], then press ⊕.**

A list of folders that contain JPEG files appears.

The selected folder is highlighted in yellow.

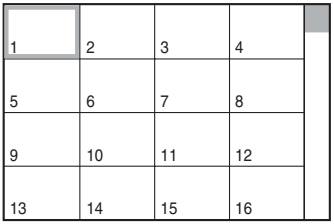


6 **Press ↑/↓ to select a folder.**

■ To go to the next or previous page
Press •→ / ←•.

■ To play JPEG image files in a folder as a slide show
Press ▷ to start playing the selected folder.
The JPEG images are played as a slide show. You can change the interval of the slide show (page 65), and add effects to the slide show (page 65).

■ To select a JPEG image file by displaying the image browser
Press PICTURE NAVI.
Previews of JPEG image files in the folder appear in 16 subscreens.



Press ←/↑/↓/→ to select the JPEG image file you want to view, then press ⊕.
To return to previous screen, press ↩ RETURN.

Tip
- The system can recognize up to 150 JPEG image files in a single folder.

To play the next or previous JPEG image file

Press →/← when the Control Menu display is not displayed. Note that you can select the next folder by continuing to press → after the last image on the current folder, but that you cannot return to the previous folder by pressing ←. To return to the previous folder, select the folder from the folder list.

To rotate a JPEG image file

When a JPEG image file is displayed on the TV screen, you can rotate the JPEG image file in 90 degree increments.
Press ↑/↓ while viewing a JPEG image file.
Press CLEAR to return to normal view.

Note
- You cannot rotate the JPEG image file when you set [JPEG RESOLUTION] in [HDMI SETUP] to [(1920 × 1080i) HD □] or [(1920 × 1080i) HD].

To stop playback

Press ■.

To turn on/off the display

Press DVD MENU.

Other operations

See “Other operations” (page 30).

To select the slide show duration of JPEG image files

1 **Press ▭ DISPLAY.**
The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [INTERVAL], then press ⊕.**
The options for [INTERVAL] appear.

3 **Press ↑/↓ to select a setting.**
- [NORMAL]: You can set to the standard duration.
- [FAST]: You can set the duration shorter than [NORMAL].
- [SLOW 1]: You can set the duration longer than [NORMAL].
- [SLOW 2]: You can set the duration longer than [SLOW 1].

4 **Press ⊕.**

Note
- Some JPEG image files may take longer to display than the option you selected. Especially progressive JPEG image files or JPEG image files of 3,000,000 pixels or more.

To select an effect for JPEG image files in the slide show

1 **Press ▭ DISPLAY.**
The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [EFFECT], then press ⊕.**
The options for [EFFECT] appear.

3 **Press ↑/↓ to select a setting.**

- [MODE 1]: The JPEG image file sweeps in from top to bottom.
- [MODE 2]: The JPEG image file stretches out from left to right of the TV screen.
- [MODE 3]: The JPEG image file stretches out from the center of the TV screen.
- [MODE 4]: The JPEG image files randomly cycle through the effects.
- [MODE 5]: The next JPEG image file slides over the previous image.
- [OFF]: Off.

4 **Press ⊕.**

Note

• The [EFFECT] setting is not effective when you set [JPEG RESOLUTION] in [HDMI SETUP] to [(1920 × 1080i) HD ▭] or [(1920 × 1080i) HD] (page 51).

Selecting a video file or folder

1 **Press FUNCTION repeatedly until "USB" appears in the front panel display.**

2 **Connect a USB device to the ⇜ (USB) port.**

After reading all data of the USB device, the list of folders appears on the TV screen.

3 **Press ▭ DISPLAY.**

The Control Menu display appears on the TV screen.

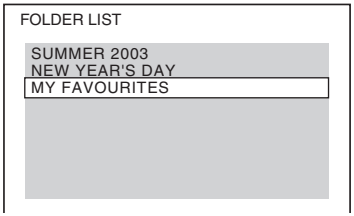
4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **When [VIDEO] is selected, press DVD MENU. When other than [VIDEO] is selected, press ↑/↓ to select [VIDEO], then press ⊕.**

A list of folders that contain video files appears.

The selected folder is highlighted in yellow.



6 **Press ↑/↓ to select a folder.**

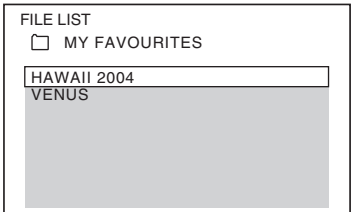
■ To play video files in a folder

Press ▷ to start playing the selected folder.

■ To select a video file

Press ⊕.

The list of files contained in the folder appears.



Press ↑/↓ to select a file and press ⊕.

The system starts playing the selected file. You can turn the file list off by pressing DVD MENU. Pressing DVD MENU again will display the folder list.

To go to the next or previous page

Press ●→ / ←●.

To stop playback

Press ■.

To play the next or previous video file

Press ▶▶| to play the next video file. Press |◀◀ twice to play the previous video file.

When you press |◀◀ once, you can go to the beginning of the current video file.

Note that you can select the next folder by continuing to press ▶▶| after the last file on the current folder, but that you cannot return to the previous folder by pressing |◀◀. To return to

the previous folder, select the folder from the folder list.

To return to the previous display

Press ↩ RETURN.

To turn on/off the display

Press DVD MENU.

Other operations

See "Other operations" (page 30).

Note

• For details on video files, see "Enjoying Video Files" (page 43).

Selecting playback priority of the file type

You can select playback priority when mixed media (audio files, JPEG image files, or video files) are in the USB device.

1 **Press FUNCTION repeatedly until "USB" appears in the front panel display.**

2 **Connect a USB device to the ⇐ (USB) port.**

After reading all data of the USB device, the list of folders appears on the TV screen.

3 **Press ▭ DISPLAY.**

The Control Menu display appears on the TV screen.

4 **Press ↑/↓ to select [MEDIA], then press ⊕.**

The options for [MEDIA] appear.

5 **Press ↑/↓ to select a setting.**

- [MUSIC]: Audio file playback has priority.
- [VIDEO]: Video file playback has priority.
- [PHOTO]: JPEG image file playback has priority. You can play JPEG image files as a slide show.

6 **Press ⊕.**

For details of the playback priority of file types under the [MEDIA] setting, see "Playback priority of file types" (page 105).

Displaying the list of audio files/JPEG image files/video files

1 **Press ▭ DISPLAY during playback.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [BROWSING], then press ⊕.**

The options for [BROWSING] appear.

3 **Press ↑/↓ to select the desired list, then press ⊕.**

- [FOLDER LIST]: The list of folders appears. Follow Step 6 of "Selecting an audio file or folder" (page 63), "Selecting a JPEG image file or folder" (page 64), or "Selecting a video file or folder" (page 66).
- [PICTURE LIST] (JPEG image files only): Previews of JPEG image files in the folder appear in 16 subscreens. Follow Step 2 of "Selecting a JPEG image file or folder" (page 64).

Playing repeatedly

(Repeat Play)

You can play the audio files/JPEG image files/ video files on the USB device repeatedly.

1 **Press ▭ DISPLAY during playback.**

The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select [REPEAT], then press ⊕.**

The options for [REPEAT] appear.

3 **Press ↑/↓ to select the item to be repeated.**

- [OFF]: Off.

- [MEMORY]: You can repeat all of the folders on the USB device.
- [FOLDER]: You can repeat the current folder.
- [TRACK] (audio files only): You can repeat the current file.
- [FILE] (video files only): You can repeat the current file.

4 **Press ⊕.**

The item is selected.

To return to normal play

Press CLEAR, or select [OFF] in Step 3.

To turn off the Control Menu display

Press ▭ DISPLAY repeatedly until the Control Menu display is turned off.

Searching for a file or folder

You can search a USB device by audio file, JPEG image file, video file, or folder. As audio files, JPEG image files, and video files are assigned unique numbers on the USB device, you can select the desired audio file, JPEG image file, or video file by entering its number.

1 **Press ▭ DISPLAY.**

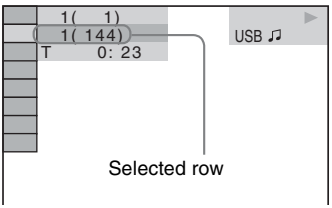
The Control Menu display appears on the TV screen.

2 **Press ↑/↓ to select the search method.**

- [FOLDER]: Folders.
- [TRACK]: Audio files.
- [FILE]: JPEG image files/video files.

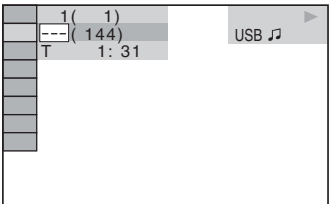
[** (**)] is selected (** refers to a number).

The number in parentheses indicates the total number of audio files, JPEG image files, video files, or folders.



3 **Press ⊕.**

[** (**)] changes to [– – (**)].



4 **Press ↑/↓ or the number buttons to select the desired number.**

If you make a mistake, press CLEAR to cancel the number.

5 **Press ⊕.**

The system starts playback from the selected number.

Viewing the information of an audio file in the front panel display

Press DISPLAY repeatedly.

Each time you press DISPLAY while playing the USB device, the display changes:
① ↔ ②

① Playing time and current track number
② Track (file) name*

* If an MP3 file has the ID3 tag, the system will display a folder name/track (file) name from the ID3 tag information.
The system can support ID3 ver 1.0/1.1/2.2/2.3. ID3 ver 2.2/2.3 tag information display has priority when both ID3 ver 1.0/1.1 and ver 2.2/2.3 tags are used for a single MP3 file.

Note

- If a file name of the audio file cannot be displayed, "*" will appear in the front panel display instead.
- The file name may not be displayed depending on the text.
- Playing time of audio files may not be displayed correctly.

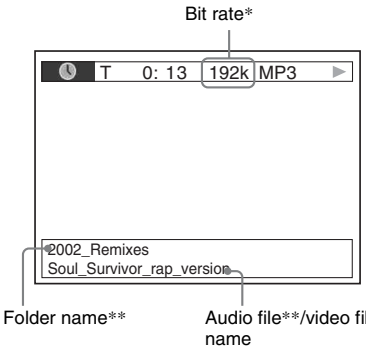
Viewing the information of an audio file/video file on the TV screen

You can display the information of an audio file/video file such as time information, name of the folder/audio file/video file, and the audio bit rate (the amount of data per second of the current audio) on the TV screen.

Press DISPLAY during playback.

The information of an audio file appears on the TV screen.

Example for playback of an audio file



* Appears when playing an audio file.

** If an MP3 file has an ID3 tag, the system will display a folder name/track (file) name from the ID3 tag information.
The system can support ID3 ver 1.0/1.1/2.2/2.3. ID3 ver 2.2/2.3 tag information display has priority when both ID3 ver 1.0/1.1 and ver 2.2/2.3 tags are used for a single MP3 file.

Note

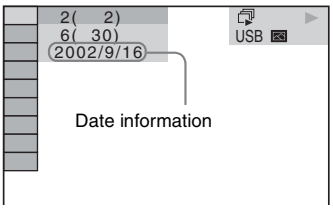
- Characters/marks may not be displayed in some languages.
- Depending on the type of file being played, the system can only display a limited number of characters. Also, depending on the file, not all text characters will be displayed.

Checking the date information of a JPEG image file

You can check the date information during playback when the Exif* tag is recorded in the JPEG image file.

Press DISPLAY during playback.

The Control Menu display appears on the TV screen.



* "Exchangeable Image File Format" is a digital camera image format defined by the Japan Electronics and Information Technology Industries Association (JEITA).

Transferring Songs onto a USB Device

You can transfer songs on an audio CD onto a USB device by encoding to MP3 format. You can also transfer MP3 files on a DATA CD/ DATA DVD onto a USB device.
For connecting the USB device, see "Connecting the USB device" (page 62).

The transferred music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.

Notes on USB transferring

- Do not connect the unit and the USB device through a USB hub.
- Make sure there is enough space in the USB device for transferring.
- Do not remove the USB device during transferring.
- When you are transferring tracks from a CD, the tracks are recorded as 128 kbps MP3 files.
- When you are transferring MP3 files from a DATA CD/DATA DVD, the MP3 files are transferred with the same bit rate as the original MP3 files.
- CD text information is not transferred in the created MP3 files.
- If you stop a transfer halfway, the MP3 file that was being created is deleted.
- Transferring stops automatically if:
  - The USB device runs out of space during transfer.
  - The number of MP3 files on the USB device reaches the limit for the number that the system can recognize.
- You can store up to 150 files in a folder.
- You can store up to 199 folders in a single USB device.
- If a folder or file that you are trying to transfer already exists on the USB device with the same name, a sequential number is added after the name without overwriting the original folder or file.

Transferring tracks on an audio CD onto a USB device

1 **Load an audio CD.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [USB TRANSFER], then press ⊕.**

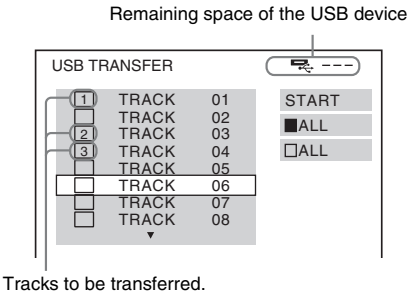
4 **Press ⊕.**

"READING" appears in the front panel display until the tracks recorded on the audio CD appear on the TV screen.

Note

- It takes several minutes to display the tracks depending on the number of tracks.

5 **Select a track that you want to transfer.**



■ To select the desired track

Press ↑/↓ to select the track, then press ⊕. The tracks are marked in the order that you select.

■ To select all tracks on the audio CD

Press ←/↑/↓/→ to select [■ ALL], then press ⊕.

■ To cancel the track

Press ↑/↓ to select the track, then press ⊕. The mark on the track is removed.

■ To cancel all the tracks

Press ←/↑/↓/→ to select [□ ALL], then press ⊕.

6 **Press ←/↑/↓/→ to select [START], then press ⊕.**

The system starts transferring and the status of transferring appears.

To cancel transferring, press ■.

Transferring MP3 files on a DATA CD/DATA DVD onto a USB device

1 **Load a DATA CD/DATA DVD.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [USB TRANSFER], then press ⊕.**

4 **Press ↑/↓ to select [TRACK] or [FOLDER], then press ⊕.**

- [TRACK]: The tracks recorded on the DATA CD/DATA DVD appear. You can transfer the desired MP3 files.
- [FOLDER]: The folders recorded on the DATA CD/DATA DVD appear. You can transfer all MP3 files in the folder. Go to Step 6.

"READING" appears in the front panel display until the tracks/folders appear on the TV screen.

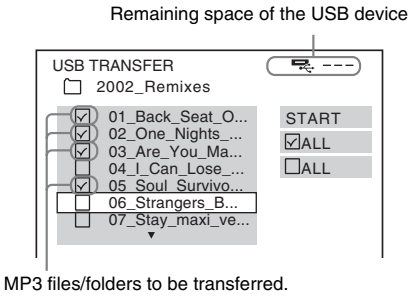
Note

- It takes several minutes to display the tracks/folders depending on the number of tracks/folders.

5 **Press ↑/↓ to select the desired folder, then press ⊕.**

The MP3 files in the selected folder appear.

6 **Select an MP3 file/folder that you want to transfer.**



■ To select the desired MP3 file/folder

Press ↑/↓ to select the MP3 file/folder, then press ⊕.

The MP3 files/folders are marked.

■ To select all MP3 files/folders

Press ←/↑/↓/→ to select [☑ ALL], then press ⊕.

■ To cancel the MP3 file/folder

Press ↑/↓ to select the MP3 file/folder, then press ⊕. The mark on the MP3 file/folder is removed.

■ To cancel all MP3 files/folders

Press ←/↑/↓/→ to select [☐ ALL], then press ⊕.

7 **Press ←/↑/↓/→ to select [START], then press ⊕.**

The system starts transferring and the transferring status appears.

To cancel transferring, press ■.

Transferring by single button press

You can transfer tracks/MP3 files simply onto a USB device by using REC TO USB.

To transfer all tracks on an audio CD or all MP3 files onto a USB device

Tracks on an audio CD are transferred onto a USB device by encoding to MP3 format.

1 **Load an audio CD/DATA CD/DATA DVD.**

2 **Press ■.**

3 **Press REC TO USB on the unit.**

The REC TO USB indicator flashes. Then, "PUSH PLAY" and the remaining space of the USB device appear alternately in the front panel display.

4 **Press ▷.**

Transferring starts and the REC TO USB indicator lights up.

When transferring is completed, "COMPLETE" appears in the front panel display and the disc and the USB device stop automatically.

To cancel transferring, press ■.

To transfer a single track on an audio CD or a single MP3 file onto a USB device

You can transfer the track/MP3 file that is currently playing back. A track on an audio CD is transferred onto a USB device by encoding to MP3 format.

1 **Load an audio CD/DATA CD/DATA DVD.**

2 **Select the desired track/MP3 file, then press ▷.**

Playback of the selected track/MP3 file starts.

3 **Press REC TO USB on the unit.**

The REC TO USB indicator flashes. Then, "PUSH PLAY" and the remaining space of the USB device appear alternately in the front panel display.

4 **Press ▷.**

Transferring of the selected track/MP3 file starts and the REC TO USB indicator lights up.

When transferring is completed, "COMPLETE" appears in the front panel display and the disc and the USB device stop automatically.

To cancel transferring, press ■.

Folder and file generation rules

When transferring onto a USB device, a "MUSIC" folder is created directly below the "ROOT". Folders and files are generated within this "MUSIC" folder as follows according to the transferring method and source.

- When transferring all tracks on an audio CD or all MP3 files on a DATA CD/DATA DVD

Source	Folder name	File name
MP3	Same as the transferring source[1)]	
Audio CD	"FLDR001"[2)]	"TRACK001"[3)]

- When transferring a single track on an audio CD or a single MP3 file on a DATA CD/DATA DVD

Source	Folder name	File name
MP3	"REC1-MP3"[4)]	Same as the transferring source[1)]
Audio CD	"REC1-CD"[4)]	"TRACK001"[3)]

[1)]Up to 64 characters of the name are assigned (including the extension).

[2)]Folders are assigned in numeric order thereafter.

[3)]Files are assigned in numeric order thereafter.

[4)]A new file is transferred in the "REC1-MP3" or "REC1-CD" folder each time REC1 transferring is performed.

Erasing audio files on a USB device

You can erase audio files (".mp3," ".wma," or ".m4a") on the USB device.

1 **Press FUNCTION repeatedly until "USB" appears in the front panel display.**

2 **Press ↑/↓ to select a folder.**

■ To erase all audio files in a folder
Press CLEAR.

■ To erase an audio file
Press ⊕.

The list of files contained in the folder appears.

Press ↑/↓ to select the desired audio file, then press CLEAR.

3 Press ←/→ to select [YES], then press ⊕.

To cancel, select [NO], then press ⊕.

Note

- Do not remove the USB device while erasing.
- If the folder to be erased contains non-audio format files or sub folders, these are erased from the list on the TV screen, but are not erased from the USB device.

Using a Sony Ericsson Mobile Phone

You can connect a Sony Ericsson mobile phone to the system and enjoy music from it via this system, or transfer music from this system to the mobile phone.

1 Connect the mobile phone to the ⇜ (USB) port.

2 Set the data transfer mode of your mobile phone to File Transfer (Mass Storage).

For details, refer to the operating instructions supplied with the mobile phone.

3 Perform playback or transfer via the system.

- Playback: See “Playing Back Files of a USB Device” (page 62).
- Transferring: See “Transferring Songs onto a USB Device” (page 70)

Note

- Connect to this system with the mobile phone turned on.
- Use the USB cable supplied with the mobile phone when connecting to the system.
- While the mobile phone is connected to this system, do not insert or detach the memory card.
- Some files supported by the mobile phone may not be supported by the system.
- When a song is registered in a music playlist on your mobile phone and you erase the song via this system, the playlist entry is not modified.

Using the DIGITAL MEDIA PORT Adapter

The DIGITAL MEDIA PORT (DMPORT) adapter is for enjoying sound from a portable audio source or computer. By connecting a DIGITAL MEDIA PORT adapter, you can enjoy sound from the connected component on the system.
Available DIGITAL MEDIA PORT adapters vary in each area.
For details on connecting the DIGITAL MEDIA PORT adapter, see page 18.

Note

- Do not connect an adapter other than the DIGITAL MEDIA PORT adapter.
- Do not connect or disconnect the DIGITAL MEDIA PORT adapter to/from the unit while the system is turned on.

Playing the connected component on the system

1 **Press FUNCTION repeatedly until "DMPORT" appears in the front panel display.**

2 **Start playback of the connected component.**

The sound and images from the connected component are played on the system or connected TV.

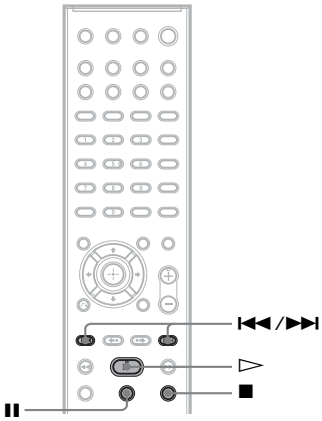
For operation details, refer to the operating instructions of the DIGITAL MEDIA PORT adapter.

Note

- Depending on the type of DIGITAL MEDIA PORT adapter, images are also output. In this case, the system outputs the composite video signal only, regardless of the type of video signal.

Tip

- Depending on the type of DIGITAL MEDIA PORT adapter, you may be able to operate a connected component using either the buttons on the remote or the unit. The following illustration shows an example of buttons that can be used in this case.



Getting Optimal Surround Sound for a Room

[SPEAKER FORMATION]

Depending on the shape of the room, you cannot install some speakers. For better surround sound, Sony recommends that first you decide the position of the speakers.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

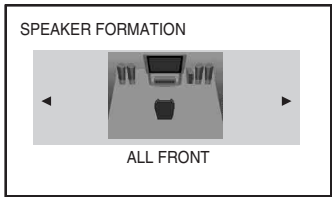
The Setup Display appears.

5 **Press ↑/↓ to select [AUDIO SETUP], then press ⊕.**

The options for [AUDIO SETUP] appear.

6 **Press ↑/↓ to select [SPEAKER FORMATION], then press ⊕.**

The options for [SPEAKER FORMATION] appear.



Note

• The image in the illustration above is different from the actual system.

7 **Press ←/→ to select a setting.**

When you install the speakers in front of the listening position (page 10), select [ALL FRONT].

Since the system is equipped with S-Force PRO Front Surround technology (page 104), you can enjoy surround sound with the speakers in front of the listening position.

- [STANDARD]: Select this when you install all the speakers normally.
- [NO CENTER]: Select this when you install the front and surround speakers only.
- [NO SURROUND]: Select this when you install the center and front speakers only.
- [FRONT ONLY]: Select this when you install the front speakers only.
- [ALL FRONT]: Select this when you install all the speakers in front of the listening position.
- [ALL FRONT - NO CENTER]: Select this when you install the front and surround speakers in front of the listening position.

8 **Press ⊕.**

The setting is made and the confirmation display appears.

9 **Press ←/→ to select [YES] or [NO], then press ⊕.**

- [YES]: Continue with [AUTO CALIBRATION]. Follow the procedure from Step 7 of "Calibrating the Appropriate Settings Automatically" (page 76).
- [NO]: Exit [SPEAKER FORMATION].

Calibrating the Appropriate Settings Automatically

[AUTO CALIBRATION]

D. C. A. C. (Digital Cinema Auto Calibration) can set the appropriate surround sound automatically.

Note

- The system outputs a loud test sound when [AUTO CALIBRATION] starts. You cannot turn the volume down. Give consideration to children and neighbors.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

The Setup Display appears.

5 **Press ↑/↓ to select [AUDIO SETUP], then press ⊕.**

The options for [AUDIO SETUP] appear.

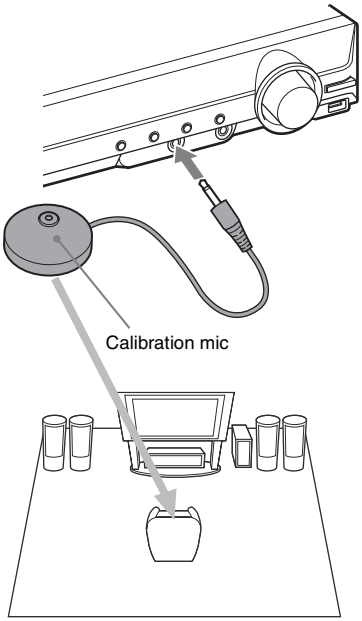
6 **Press ↑/↓ to select [AUTO CALIBRATION], then press ⊕.**

The options for [AUTO CALIBRATION] appear.

7 **Connect the calibration mic (supplied) to the A.CAL MIC jack on the front panel.**

Set up the calibration mic at ear level using a tripod, etc. (not supplied).

The front of each speaker should face the calibration mic, and there should be no obstruction between the speakers and the calibration mic.



8 **Press ←/→ to select [YES].**

9 **Press ⊕.**

[AUTO CALIBRATION] starts.

Be quiet during the measurement.

Note

- The environment of the room in which the system is installed may affect measurements. When the measurements differ considerably from the status of the speaker installation, perform the speaker settings manually by following "Settings for the speakers" (page 53).
- For [FRONT L], [FRONT R], or [SUBWOOFER], the system calibrates all the speakers, but only the measurement of the nearer speaker is displayed.

10 **Press ←/→ to select [YES] or [NO], then press ⊕.**

■ The measurement is OK.

Disconnect the calibration mic, then select [YES]. The result is implemented.

When you want to cancel the measurement and retry [AUTO CALIBRATION], select [NO].

■ **The measurement is not OK.**
Follow the message, then select [YES] to retry.

Note

• While the Auto Calibration function is working, do not operate the system.

Controlling the TV with the Supplied Remote

You can control the TV (Sony only) by using the following buttons. Use these buttons (other than TV I/⏻ and THEATRE) while pressing the TV button.

Note

• Depending on the TV, you may not be able to control your TV or to use some of the buttons.

By pressing	You can
TV I/⏻	Turn the TV on/off.
THEATRE	Enjoy optimal image quality suited for movies.
INPUT*	Switch the TV's input source between the TV and other input sources.
VOLUME +/–*	Adjust the TV volume.
PROG +/–*	Select the TV channel.
Number buttons*, -/--* ENTER*	Select the TV channel.
TOOLS*	Displays the operation menu for the current display.
RETURN*	Return to the previous channel or layer on the menu of the TV.
MENU*	Display the menu of the TV.
MUTING*	Turn off the TV sound temporarily.
←/↑/↓/→*, ⊕ *	Select the item on the menu.

* Use these buttons while pressing the TV button.

Enjoying Karaoke

DVD-V DVD-VR VIDEO CD CD DATA-CD DATA DVD

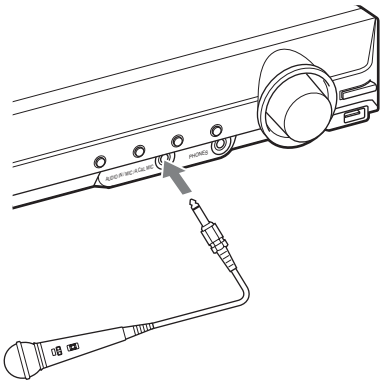
You can enjoy karaoke (singing along with a disc) by setting the system to karaoke mode.

Tip
- You can also enjoy the karaoke function with an audio file in the USB device. In this case, some functions may not work.

Setting the system to karaoke mode

1 Press FUNCTION repeatedly until "DVD" appears in the front panel display.

2 Plug a microphone into the MIC jack.



The system enters karaoke mode.
" " lights up in the front panel display.

3 Start music playback.

Sing along to the music.
The microphone sound is output from the system's speakers.

To cancel karaoke mode

Disconnect the microphones.

To set the system to karaoke mode on the Control Menu display

1 Press DISPLAY.

The Control Menu display appears.

Note
- The Control Menu display will not appear if no disc is in the unit.

2 Press ↑/↓ repeatedly to select [KARAOKE MODE], then press ⊕.

The options for [KARAOKE MODE] appear.

3 Press ↑/↓ to select [ON], then press ⊕.

The system enters karaoke mode.
To cancel karaoke mode, select [OFF].

Note
- Before connecting, press MIC VOL – to set the microphone volume to minimum.
- If you play the Super Audio CD layer of a Super Audio CD (page 32), karaoke mode will be set to off automatically. In this case, the beginning of the sound may be cut off. To avoid the sound cutting, play the Super Audio CD after you set [KARAOKE MODE] to [OFF].
- In karaoke mode, the overall volume may drop.
- Microphone sound is not output when:
  - the microphone is not connected to the unit properly.
  - the microphone volume is set to minimum.
  - you use a microphone other than the monaural dynamic type.

Tip
- The karaoke play is performed with the audio channel you selected using AUDIO (page 31).

Adjusting the microphone

You can adjust the microphone volume and level of the echo effect.

To adjust the microphone volume

Press MIC VOL +/– to adjust the microphone volume.

To add the echo effect

Press ECHO.

Each time you press ECHO, the echo level changes as follows:

"ECHO OFF" → "ECHO 1"
↑ ↓
"ECHO 3" ← "ECHO 2"

To cancel the echo effect, select "ECHO OFF."

Note

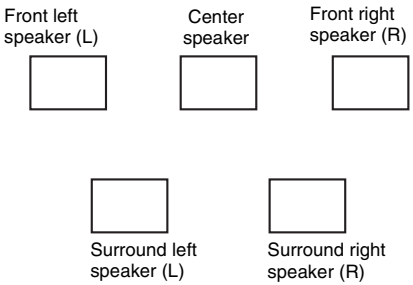
• If howling occurs:
– move the microphone away from the speakers.
– lower the microphone volume or echo level.
– lower the overall volume.

Dolby Digital Karaoke format

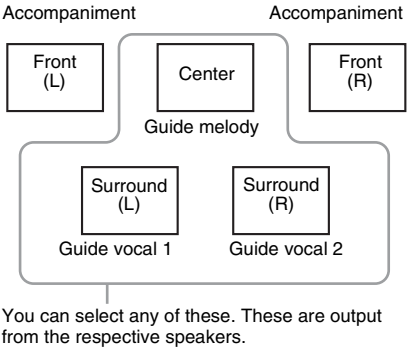
DVD-V

Dolby Digital format, which reproduces surround sound using 5 channels, can also contain the "Dolby Digital Karaoke" format which is specialized for karaoke. In the Dolby Digital Karaoke format discs, guide melody and guide vocal tracks are recorded in addition to the accompaniment. You can select them when the system is in karaoke mode.

Speaker output in normal Dolby Digital format (5 channel surround)

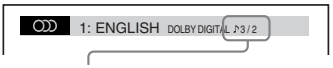


Speaker output in Dolby Digital Karaoke format



You can check the audio information by pressing AUDIO (page 31). When playing a Dolby Digital Karaoke disc, "♪" appears as the current audio format.

Example:



2/0: Recorded only with accompaniment.
3/0: Recorded with guide melody.
3/1: Recorded with guide melody and one guide vocal.
3/2: Recorded with guide melody and two guide vocals.

Changing the key of a song (Key Control)

You can change the key to suit your vocal range, except when the system is in stop mode.

Press KEYCON ♯/♭ to suit your vocal range in karaoke mode.

You can adjust the key higher or lower in 13 steps (♭6 – ♯6).

Note

• Depending on the disc, you may not be able to change the key.

- The key automatically returns to the original key when:
  - you turn off the power.
  - you change the function.
  - the disc tray is opened.
  - you stop playback.
  - the title or track changes.
  - you change the album.
  - the play item is changed during PBC playback.
  - you perform Scan Play.
  - you cancel karaoke mode.
  - the DVD layer is changed.
- This function does not affect TV sound if the system and TV are connected with the HDMI cable and system sound is output from the TV.

Playing karaoke with any stereo disc (Karaoke Pon)

You can enjoy karaoke with a stereo-recorded disc, even if it is a non-karaoke disc, by reducing the sound of the vocals.

Press KARAOKE PON in karaoke mode.

To cancel Karaoke Pon mode

Press KARAOKE PON again.

Note

- This function may not work well in the following cases:
  - Only a few instruments are playing
  - A duet is playing
  - The vocals on the disc deviate from the center
  - Monaural-recorded discs (the accompaniment is also reduced)
  - Multiplex
- During Karaoke Pon mode, the stereo effect is reduced.
- Karaoke Pon mode is automatically canceled when:
  - you turn off the power.
  - you change the function.
  - the disc tray is opened.
  - AUDIO stream is changed.
  - you set [VOCAL SELECT] to other than [OFF].
  - you cancel karaoke mode.

Selecting the vocals (Vocal Select)

DVD-V VIDEO CD CD

When playing a DVD with the Dolby Digital Karaoke format in karaoke mode, you can turn on or off the guide vocal recorded in the karaoke track.
When playing a VIDEO CD/CD in karaoke mode, you can listen to the vocals.

You can also change the guide vocal channel. You can select different kinds of vocals.

1 Press DISPLAY in karaoke mode.

The Control Menu display appears.

2 Press ↑/↓ repeatedly to select [VOCAL SELECT], then press ⊕.

The options for [VOCAL SELECT] appear.

3 Press ↑/↓ repeatedly to select the desired vocal channel.

The output channel changes as follows.

■ DVD VIDEO

- [OFF]: The guide vocal is canceled.
- [1+2]: Guide vocal 1+2
- [1]: Guide vocal 1
- [2]: Guide vocal 2

■ VIDEO CD/CD

- [OFF]: The guide vocal is canceled.
- [L+R]: Same sound is output from both speakers.
- [STEREO]: The standard stereo sound

■ Super VCD

- [OFF]: The guide vocal is canceled.
- [1:L+R]: Same sound of the audio track 1 is output from both speakers.
- [1:STEREO]: The stereo sound of the audio track 1
- [2:L+R]: Same sound of the audio track 2 is output from both speakers.
- [2:STEREO]: The stereo sound of the audio track 2

4 Press ⊕.

Note

- Depending on the discs, you may not be able to change the guide vocal channel.
- The channel returns to the default setting when:
  - you turn off the power.
  - you change the function.
  - the disc tray is opened.
  - AUDIO stream is changed.
  - you cancel karaoke mode.
  - you set Karaoke Pon mode to on.

Selecting the scoring mode (Score Mode)

When karaoke mode is turned on, you can use the scoring mode.
Your score is calculated by comparing your voice with the music source.

1 **Press DISPLAY.**

The Control Menu display appears.

2 **Press ↑/↓ repeatedly to select [SCORE MODE], then press ⊕.**

The options for [SCORE MODE] appear.

3 **Press ↑/↓ repeatedly to select a setting.**

- [BEGINNER 1]: Beginner level. The score is displayed while singing.
- [BEGINNER 2]: Beginner level.
- [EXPERT 1]: Advanced level. The score is displayed while singing.
- [EXPERT 2]: Advanced level.
- [DEMO]: Demonstration mode. The score is displayed regardless of singing.

4 **Press ⊕.**

5 **Start playing the music.**

6 **Press SCORE before singing a song in karaoke mode.**

The previous highest score appears on the TV screen.

7 **After singing for more than a minute, press SCORE again to view your score.**

Your score is calculated on a scale of 0 to 99.

Your score is displayed for five seconds, during which time the system enters pause mode.

After your score, the ranking is displayed as follows.

- The ranking is displayed as a list with the top 3 scores.
- Your score and ranking for the last song flash.
- If you are in the top 10, your ranking is displayed. If not, [10+] is displayed.
- If your score is "0," your score is not displayed in the ranking list.
- In a tie score, the most recent score becomes higher.

Note

- The highest score is reset when the system is turned off.
- The score mode function may be canceled when certain remote buttons are pressed.
- In some cases, you may not be able to use the scoring mode.
- The ranking list is cleared when the system is in standby mode.

Tip

- The [SCORE MODE] setting is automatically changed to [BEGINNER 1] when the system is turned off.

Using the Sound Effect

Reinforcing bass frequencies

You can reinforce bass frequencies.

Press DYNAMIC BASS.

"D. BASS ON" appears in the front panel display and bass frequencies are effectively reinforced.

To turn off the sound effect

Press DYNAMIC BASS again.

Enjoying the sound at low volume

You can enjoy sound effects or dialogue, as you would in a movie theater, even at low volume. It is useful for watching movies at night.

Press NIGHT.

"NIGHT ON" appears in the front panel display and the sound effect is activated.

Note

- This effect does not work for a Super Audio CD. When you load a Super Audio CD during "NIGHT ON," the sound effect turns off automatically.
- When sound is output from the center speaker, this effect is more pronounced, as speech (movie dialog, etc.) is easy to hear. When sound is not output from the center speaker, or you are using the headphones, the system optimally adjusts the volume.

To turn off the sound effect

Press NIGHT again.

Enhancing compressed sound

You can enhance compressed sound such as an MP3 audio file.

This effect is activated automatically when all the following conditions are satisfied:

– The function is set to "DMPORT," "AUDIO," or "USB".
– "DEC. MODE" is set to "A.F.D. STD" or "A.F.D. MULTI."
– The sound mode is set to "AUTO," "MOVIE," "MUSIC," or "NEWS".
– Headphones are not connected.
– Karaoke mode is off.

To turn off the sound effect

Select other than "A.F.D. STD" or "A.F.D. MULTI" for "DEC. MODE" (page 26).

Selecting the Effect to Suit the Source

You can select a suitable sound mode for movies or music.

Press SOUND MODE repeatedly during playback until the desired mode appears in the front panel display.

- "AUTO": The system automatically selects "MOVIE" (the MOVIE indicator lights up) or "MUSIC" (the MUSIC indicator lights up) to produce the sound effect depending on the disc or sound stream.
- "MOVIE": The system provides the sound for movies. The MOVIE indicator lights up.
- "MOVIE-D.C.S.-"*: The system reproduces the sound characteristics of the Sony Pictures Entertainment "Cary Grant Theater" cinema production studio. This is a standard mode, great for watching most any type of movie. The MOVIE indicator lights up.
- "MUSIC": The system provides the sound for music. The MUSIC indicator lights up.
- "SPORTS": The system adds reverberation for sports program.
- "NEWS": The system provides the sound for voice program, such as news.

* DCS technology is used (page 103).

Note

- When you connect headphones to the unit, play a Super Audio CD, or the system is in karaoke mode, you can select "AUTO," "MOVIE," or "MUSIC" only.
- Depending on the disc or source, when you select "AUTO," the beginning of the sound may be cut off as the system selects the optimum mode automatically. To avoid cutting the sound, select other than "AUTO."
- Depending on the input stream, the sound mode may not be effective.

Enjoying Multiplex Broadcast Sound

(DUAL MONO)

You can enjoy multiplex broadcast sound when the system receives or plays a Dolby Digital multiplex broadcast signal.

Note

- To receive a Dolby Digital signal, you need to connect a TV or other component to the unit with an optical or coaxial digital cord (page 17) and set the digital output mode of the TV or other component to Dolby Digital.

Press AUDIO repeatedly until the desired signal appears in the front panel display.

- "MAIN": Sound of the main language will be output.
- "SUB": Sound of the sub language will be output.
- "MAIN+SUB": Mixed sound of both the main and sub languages will be output.

Changing the Input Level of the Sound from Connected Components

Distortion may occur when you listen to a component connected to the TV or SAT/CABLE jacks on the rear panel, or to the AUDIO IN jack on the front panel. Distortion is not a malfunction and will depend on the component connected.
To prevent distortion, reduce the input level on the unit.

1 **Press FUNCTION repeatedly until "TV," "SAT/CABLE," or "AUDIO" appears in the front panel display.**

2 **Press SYSTEM MENU.**

3 **Press ↑/↓ repeatedly until "ATTENUATE" appears in the front panel display, then press ⊕ or →.**

4 **Press ↑/↓ to select a setting.**

- "ATT ON": You can attenuate the input level. The output level is changed.
- "ATT OFF": Normal input level.

5 **Press ⊕.**

The setting is made.

6 **Press SYSTEM MENU.**

The system menu turns off.

Using the Sleep Timer

You can set the system to turn off at a preset time, so you can fall asleep listening to music. You can preset the time in 1 or 10-minute increments.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "SLEEP" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ to select a setting.**

The minutes display (the remaining time) changes by 10 minutes.

Tip

- You can select the remaining time by pressing the number buttons. In this case, you can preset the time in 1-minute increments.

4 **Press ⊕.**

The setting is made and "SLEEP" flashes in the front panel display.

5 **Press SYSTEM MENU.**

The system menu turns off.

Changing the Brightness of the Front Panel Display and Illuminations

You can set the brightness of the front panel display to either of 2 levels, and the illuminations on the front panel of the unit (POWER, OPERATION DIAL, REC TO USB) to on/off.

1 **Press SYSTEM MENU.**

2 **Press ↑/↓ repeatedly until "DIMMER" appears in the front panel display, then press ⊕ or →.**

3 **Press ↑/↓ to select the brightness of the front panel display.**

- "DIMMER OFF": The front panel display is bright and the illuminations on the front panel display light up.
- "DIMMER ON": The front panel display is dark and the illuminations on the front panel display go off.

4 **Press ⊕.**

The setting is made.

5 **Press SYSTEM MENU.**

The system menu turns off.

Viewing Information About the Disc

DVD-V DVD-VR VIDEO CD SuperAudioCD CD DATA-CD DATA DVD

Viewing the playing time and remaining time in the front panel display

Press DISPLAY repeatedly.

Each time you press DISPLAY while playing the disc, the display changes:
① → ② → ... → ① → ...
Some displayed items may disappear after a few seconds.

■ DVD VIDEO/DVD-VR
① Playing time of the current title
② Remaining time of the current title
③ Playing time of the current chapter
④ Remaining time of the current chapter
⑤ Disc name
⑥ Title and chapter

■ VIDEO CD (without PBC functions)/ Super Audio CD/CD
① Playing time of the current track
② Remaining time of the current track
③ Playing time of the disc
④ Remaining time of the disc
⑤ Track name
⑥ Track and index*

* VIDEO CD/Super Audio CD only.

■ Super VCD
① Playing time of the current track
② Track text
③ Track and index number

■ DATA CD (MP3 file)/DATA DVD (MP3 file)
① Playing time and current track number
② Track (file) name*

* If an MP3 file has an ID3 tag, the system will display an album name or title name from the ID3 tag information.
The system can support ID3 ver 1.0/1.1/2.2/2.3. ID3 ver 2.2/2.3 tag information display has priority when both ID3 ver 1.0/1.1 and ver 2.2/2.3 tags are used for a single MP3 file.

■ DATA CD (video file)/DATA DVD (video file)

① Playing time of the current file
② Current file name
③ Current album and file number

Note

- The system can only display the first level of the DVD/CD text, such as the disc name or title.
- If a file name of the MP3 file cannot be displayed, "*" will appear in the front panel display instead.
- The disc name or track name may not be displayed depending on the text.
- Playing time of MP3 files and video files may not be displayed correctly.

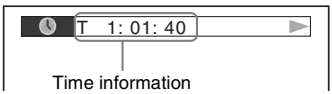
Tip

- When the system is playing a VIDEO CD with PBC functions, the playing time is displayed.

Viewing the playing time and remaining time on the TV screen

1 Press DISPLAY during playback.

The following display appears on the TV screen.



2 Press DISPLAY repeatedly to change the time information.

The display and the kinds of time that you can check depend on the disc you are playing.

■ DVD VIDEO/DVD-VR

- T **:**:**
  Playing time of the current title
- T-**:**:**
  Remaining time of the current title
- C **:**:**
  Playing time of the current chapter
- C-**:**:**
  Remaining time of the current chapter

■ VIDEO CD (with PBC functions)

- **:**
  Playing time of the current scene

■ VIDEO CD (without PBC functions)/ Super Audio CD/CD

- T **:**
  Playing time of the current track
- T-**:**
  Remaining time of the current track
- D **:**
  Playing time of the current disc
- D-**:**
  Remaining time of the current disc

■ DATA CD (MP3 file)/DATA DVD (MP3 file)

- T **:**
  Playing time of the current track

■ DATA CD (video file)/DATA DVD (video file)

- **:**:**
  Playing time of the current file

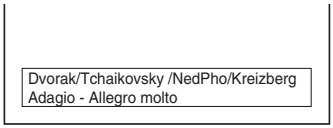
Note

- Characters/marks may not be displayed in some languages.
- Depending on the type of disc being played, the system can only display a limited number of characters. Also, depending on the disc, not all text characters will be displayed.

Checking the play information of the disc

To check DVD/Super Audio CD/CD text

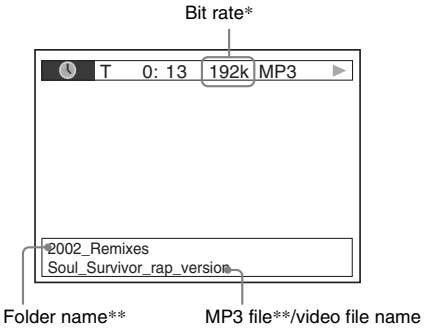
Press DISPLAY repeatedly during playback to display text recorded in the DVD/Super Audio CD/CD.
The DVD/Super Audio CD/CD text appears only when text is recorded in the disc. You cannot change the text. If the disc does not contain text, "NO TEXT" appears.



To check DATA CD/DATA DVD (MP3 file/video file) text

By pressing DISPLAY while playing MP3 files or video files on a DATA CD/DATA DVD, you can display the name of the folder/MP3 file/video file, and the audio bit rate (the amount of data per second of the current audio) on the TV screen.

Example for playback of an audio file



* Appears when playing an MP3 file on a DATA CD/DATA DVD.

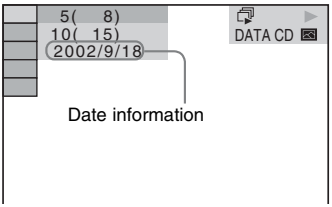
** If an MP3 file has the ID3 tag, the system will display an album name or title name from the ID3 tag information.
The system can support ID3 ver 1.0/1.1/2.2/2.3. ID3 ver 2.2/2.3 tag information display has priority when both ID3 ver 1.0/1.1 and ver 2.2/2.3 tags are used for a single MP3 file.

Checking the date information of a JPEG image file

You can check the date information during playback when the Exif* tag is recorded in the JPEG image file.

Press DISPLAY during playback.

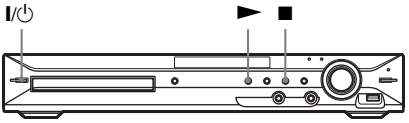
The Control Menu display appears on the TV screen.



* "Exchangeable Image File Format" is a digital camera image format defined by the Japan Electronics and Information Technology Industries Association (JEITA).

Returning to the Default Settings

Returning the system parameters, such as preset stations, to the default settings



1 **Press I/⏻ to turn on the system.**

2 **Press ■, ►, and I/⏻ on the unit at the same time.**

"COLD RESET" appears in the front panel display and the system returns to default settings.

Returning the [SETUP] settings to the default

You can return the [SETUP] settings (page 47) other than [PARENTAL CONTROL] to the default settings.

1 **Press FUNCTION repeatedly until "DVD" appears in the front panel display.**

2 **Press DISPLAY while the system is in stop mode.**

The Control Menu display appears on the TV screen.

3 **Press ↑/↓ to select [SETUP], then press ⊕.**

The options for [SETUP] appear.

4 **Press ↑/↓ to select [CUSTOM], then press ⊕.**

The Setup Display appears.

5 **Press ↑/↓ to select [SYSTEM SETUP], then press ⊕.**

The options for [SYSTEM SETUP] appear.

6 **Press ↑/↓ to select [RESET] and press →.**

7 **Press ←/→ to select [YES].**

You can also quit the process and return to the Control Menu display by selecting [NO] here.

8 **Press ⊕.**

Do not press I/⏻ while resetting the system as it takes a few seconds to complete.

Note

• The [MEDIA], [INTERVAL], [EFFECT], and [MULTI/2CH] settings also return to the default settings.

Precautions

On power sources

- Unplug the unit from the wall outlet (mains) if you do not intend to use it for an extended period of time. To disconnect the cord, pull it out by the plug, never by the cord.

On placement

- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- At high volume, over long periods of time, the cabinet becomes hot to the touch. This is not a malfunction. However, touching the cabinet should be avoided. Do not place the system in a confined space where ventilation is poor as this may cause overheating.
- Do not block the ventilation slots by putting anything on the system. The system is equipped with a high power amplifier. If the ventilation slots are blocked, the system can overheat and malfunction.
- Do not place the system on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation slots.
- Do not install the system near heat sources such as radiators, or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.
- Do not install the system in an inclined position. It is designed to be operated in a horizontal position only.
- Keep the system and discs away from components with strong magnets, such as microwave ovens, or large loudspeakers.
- Do not place heavy objects on the system.

On operation

- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the unit. Should this occur, the system may not operate properly. In this case, remove the disc and leave the system turned on for about half an hour until the moisture evaporates.
- When you move the system, take out any disc. If you don't, the disc may be damaged.
- If anything falls into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.

On adjusting volume

- Do not turn up the volume while listening to a section with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level section is suddenly played.

On cleaning

- Clean the cabinet, panel, and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.
  If you have any questions or problems concerning your system, please consult your nearest Sony dealer.

On cleaning discs, disc/lens cleaners

- **Do not use cleaning discs or disc/lens cleaners (including wet or spray types). These may cause the apparatus to malfunction.**

On your TV's color

- If the speakers should cause the TV screen to have color irregularity, turn off the TV then turn it on after 15 to 30 minutes. If color irregularity should persist, place the speakers further away from the TV set.

IMPORTANT NOTICE
Caution: This system is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

On moving the system

Before moving the system, make sure that there is no disc inserted, and remove the AC power cord (mains lead) from the wall outlet (mains).

Notes about the Discs

On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.

- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

On cleaning

- Before playing, clean the disc with a cleaning cloth.
  Wipe the disc from the center out.

- Do not use solvents such as benzine, thinner, commercially available cleaners, or anti-static spray intended for vinyl LPs.

This system can only play back a standard circular disc. Using neither standard nor circular discs (e.g., card, heart, or star shape) may cause a malfunction.

Do not use a disc that has a commercially available accessory attached, such as a label or ring.

Troubleshooting

If you experience any of the following difficulties while using the system, use this troubleshooting guide to help remedy the problem before requesting repairs. Should any problem persist, consult your nearest Sony dealer.
Note that if service personnel changes some parts during repair, these parts may be retained.

Power

Symptom	Remedy
The power is not turned on.	• Check that the AC power cord (mains lead) is connected securely. • Press I/⏻ after "STANDBY" disappears from the front panel display.
If "PROTECTOR" and "PUSH POWER" appear alternately in the front panel display.	Press I/⏻ to turn off the system, and check the following items after "STANDBY" disappears. • Are the + and – speaker cords short-circuited? • Are you using only the specified speakers? • Is anything blocking the ventilation holes of the system? • After checking the above items and fixing any problems, turn on the system. If the cause of the problem cannot be found even after checking all the above items, consult your nearest Sony dealer.

Picture

Symptom	Remedy
There is no picture.	• The video connecting cords are not connected securely. • The video connecting cords are damaged. • The unit is not connected to the correct TV input jack (page 15). • The video input on the TV is not set so that you can view pictures from the system. • Check the output method on your system (page 15). • You have set progressive format but your TV cannot accept the signal in progressive format. In this case, return the setting to interlace format (the default setting) (page 24). • Even if your TV is compatible with progressive format (525p/625p) signals, the image may be affected when you set progressive format. In this case, return the setting to interlace format (the default setting) (page 24). • Re-connect the connecting cord securely. • The unit is connected to an input device that is not HDCP (High-bandwidth Digital Content Protection) compliant ("HDMI" on the front panel does not light up) (page 15). • If the HDMI OUT jack is used for video output, change the type of video signal output from the HDMI OUT jack. It may solve the problem (page 24). Connect the TV and the unit using a video jack other than the HDMI OUT, and switch the TV's input to the connected video input so that you can see the on-screen displays. Change the type of video signal output from the HDMI OUT jack, and switch the TV's input back to HDMI. If the picture still does not appear, repeat the Steps and try other options. • You have set [PROGRESSIVE (COMPONENT OUT)] in [VIDEO SETUP] to [ON] (page 49) even though your TV cannot accept the progressive signal. In this case, disconnect the HDMI cable from the unit and then set it to [OFF]. • If you are using the "DMPORT" function, the video signal is output from the VIDEO OUT jack only.
Picture noise appears.	• The disc is dirty or flawed. • If the picture output from your system goes through your VCR to get to your TV, the copy-protection signal applied to some DVD programs could affect picture quality. If you experience problems when you connect your unit through your VCR, try connecting your unit to your TV's video input directly (page 15).
Even though you set the aspect ratio in [TV TYPE] of [VIDEO SETUP], the picture does not fill the TV screen.	• The aspect ratio on the disc is fixed.
Color irregularity occurs on the TV screen.	The system's speakers contain magnet parts, so magnetic distortion may occur. When color irregularity occurs on the TV screen, check the following items. • If the speakers are used with a CRT-based TV or projector, install the speakers at least 0.3 meters (1.0 ft) from the TV set. • If the color irregularity persists, turn off the TV set once, then turn it on after 15 to 30 minutes. • If howling occurs, reposition the speakers farther away from the TV set. • Make sure that no magnetic object (magnetic latch on a TV stand, health care device, toy, etc.) is placed near the speakers.

Sound

Symptom	Remedy
There is no sound.	• The speaker cord is not connected securely. • Press MUTING on the remote if "MUTING ON" is displayed in the front panel display. • The system is in pause mode or in Slow-motion Play mode. Press ▷ to return to normal play mode. • Fast forward or fast reverse is being performed. Press ▷ to return to normal play mode. • Check the speaker settings (page 53). • The component connected to the HDMI OUT jack does not conform to the audio signal format, in this case set [AUDIO (HDMI)] in [HDMI SETUP] to [ON] (page 51).
No sound is output from the HDMI OUT jack.	• Set [AUDIO (HDMI)] in [HDMI SETUP] to [ON] (page 51). • The HDMI OUT jack is connected to a DVI (Digital Visual Interface) device (DVI (Digital Visual Interface) jacks do not accept audio signals). • The HDMI OUT jack does not output Super Audio CD sound. • Try the following: ① Turn the system off and on again. ② Turn the connected component off and on again. ③ Disconnect and then connect the HDMI cable again.
The left and right sounds are unbalanced or reversed.	• Check that the speakers and components are connected correctly and securely.
There is no sound from the subwoofers.	• Check the speaker connections and settings (pages 13, 53).
Severe hum or noise is heard.	• Check that the speakers and components are connected securely. • Check that the connecting cords are away from a transformer or motor, and at least 3 meters (10 ft) away from your TV set or a fluorescent light. • Move your TV away from the audio components. • The plugs and jacks are dirty. Wipe them with a cloth slightly moistened with alcohol. • Clean the disc.
The sound loses stereo effect when you play a VIDEO CD, a CD, or an MP3 file.	• Select stereo sound by pressing AUDIO (page 31). • Make sure the unit is connected properly.
The surround effect is difficult to hear when you are playing a sound track of Dolby Digital, DTS, or MPEG audio.	• Check the "DEC. MODE" setting (page 26). • Check the speaker connections and settings (pages 13, 53). • Depending on the DVD, the output signal may not be the entire 5.1 channel. It may be monaural or stereo even if the sound track is recorded in Dolby Digital or MPEG audio format.
The sound comes from the center speaker only.	• Depending on the disc, the sound may come from the center speaker only.
No sound is heard from the center speaker.	• Check the speaker connections and settings (pages 13, 53). • Check the "DEC. MODE" setting (page 26). • Depending on the source, the effect of the center speaker may be less noticeable. • A 2 channel source is being played.

Symptom	Remedy
No sound or only a very low-level sound is heard from the surround speakers.	• Check the speaker connections and settings (pages 13, 53). • Check the "DEC. MODE" setting (page 26). • Depending on the source, the effect of the surround speakers may be less noticeable. • A 2 channel source is being played.
The beginning of the sound is cut off.	• Set the sound mode to "MOVIE" or "MUSIC" (page 83). • Select "A.F.D. STD" for "DEC. MODE" (page 26).
There is no sound from the DIGITAL IN COAXIAL/ OPTICAL jack.	• The sampling frequency of the input stream is more than 48 kHz.
Microphone sound is not output.	• Set the karaoke mode to on (page 78). • Connect the microphone to the unit properly. • Connect a monaural dynamic microphone.

Operation

Symptom	Remedy
Radio stations cannot be tuned in.	• Check that the antenna (aerial) is connected securely. Adjust the antenna (aerial) or connect an external antenna (aerial) if necessary. • The signal strength of the stations is too weak (when tuning in with automatic tuning). Use direct tuning. • No stations have been preset or the preset stations have been cleared (when tuning by scanning preset stations). Preset the stations (page 56).
The remote does not function.	• There are obstacles between the remote and the unit. • The distance between the remote and the unit is too far. • The remote is not pointed at the remote sensor on the unit. • The batteries in the remote are weak.
The disc does not play.	• There is no disc inserted. • The disc is upside down. Insert the disc with the playback side facing down. • The disc is skewed on the disc tray. • The system cannot play CD-ROMs, etc. (page 5). • The region code on the DVD does not match the system. • Moisture has condensed inside the unit and may cause damage to the lenses. Remove the disc and leave the unit turned on for about half an hour.
The MP3 file cannot be played.	• The DATA CD is not recorded in ISO 9660 Level 1/Level 2, or Joliet. • The DATA DVD is not recorded in UDF (Universal Disk Format). • The MP3 file does not have the extension ".mp3." • The data is not formatted in MP3 even though it has the extension ".mp3." • The data is not MPEG1 Audio Layer 3 data. • The system cannot play audio tracks in MP3PRO format. • Check the [MEDIA] setting (page 42).

Symptom	Remedy
The JPEG image file cannot be played.	• The DATA CD is not recorded in ISO 9660 Level 1/Level 2, or Joliet. • The DATA DVD is not recorded in UDF (Universal Disk Format). • It has an extension other than ".jpeg" or ".jpg." • It is larger than 3,072 (width) × 2,048 (height) in normal mode, or more than 2,000,000 pixels in progressive JPEG image file which is mainly used on Internet Web sites. • It does not fit the TV screen (those images are reduced). • Check the [MEDIA] setting (page 42).
The video file cannot be played.	• The file is not created in DivX format or MP4 file format. • The file has an extension other than ".avi," ".divx," ".mp4," or ".m4v." • The DATA CD is not recorded in ISO 9660 Level 1/Level 2, or Joliet. • The DATA DVD is not recorded in UDF (Universal Disk Format). • The video file is larger than 720 (width) × 576 (height). • Check the [MEDIA] setting (page 42).
The titles of folder/file/file name are not displayed correctly.	• The system can only display numbers and letters of the alphabet. Other characters are displayed as [*].
A disc does not start playing from the beginning.	• Program Play, Shuffle Play, or Repeat Play has been selected. Press CLEAR to cancel these functions before playing a disc. • Resume Play has been selected. During stop, press ■ on the unit or the remote and then start playback (page 33). • The title, DVD or PBC menu automatically appears on the TV screen.
The system starts playing the disc automatically.	• The DVD features an auto playback function.
Playback stops automatically.	• Some discs may contain an auto pause signal. While playing such a disc, the system stops playback at the auto pause signal.
You cannot perform some functions such as stop, search, Slow-motion Play, or Repeat Play.	• Depending on the disc, you may not be able to perform some of these operations. Refer to the operating instructions supplied with the disc.
Messages do not appear on the TV screen in the language you want.	• In the Setup Display, select the desired language for the on-screen display in [OSD] under [LANGUAGE SETUP] (page 48).
The language for the sound track cannot be changed.	• Multilingual tracks are not recorded on the DVD being played. • The DVD prohibits changing the language for the sound track.
The subtitle language cannot be changed.	• Multilingual subtitles are not recorded on the DVD being played. • The DVD prohibits changing the subtitles.
The subtitle cannot be turned off.	• The DVD prohibits turning off subtitles.
The angles cannot be changed.	• Multi-angles are not recorded on the DVD being played (page 31). • The DVD prohibits changing the angles.
A disc cannot be ejected and "LOCKED" appears in the front panel display.	• Contact your Sony dealer or local authorized Sony service facility.

Symptom	Remedy
[Data error] appears on the TV screen when playing a DATA CD or DATA DVD.	• The MP3 file/JPEG image file/video file you want to play is broken. • The data is not MPEG1 Audio Layer 3 data. • The JPEG image file format does not conform to DCF. • The file has the extension ".jpg" or ".jpeg," but is not in JPEG format. • The file you want to play has the extension ".avi" or ".divx" but is not in DivX format, or is in DivX format but does not conform to DivX Certified profiles. • The file you want to play has the extension ".mp4" or ".m4v" but is not in MP4 format, or is in MP4 format but does not conform to MPEG4 Simple Profiles.
The system does not work normally.	• Disconnect the AC power cord (mains lead) from the wall outlet (mains), then reconnect after several minutes.
The Control for HDMI function does not work.	• When "HDMI" does not light up in the front panel display, check the HDMI connection (page 15). • Set [CONTROL FOR HDMI] in [HDMI SETUP] to [ON] (page 50). • Make sure that the connected component is compatible with the [CONTROL FOR HDMI] function. • Check that the AC power cord (mains lead) of the connected component is connected securely. • Check the connected component's setting for the Control for HDMI function. Refer to the operating instructions supplied with the component. • If you change the HDMI connection, connect and disconnect the AC power cord (mains lead), or have a power failure, set [CONTROL FOR HDMI] in [HDMI SETUP] to [OFF], then set [CONTROL FOR HDMI] in [HDMI SETUP] to [ON] (page 50). • For details, see "Using the Control for HDMI Function for "BRAVIA" Sync" (page 59).
No sound is output from the system and TV while using the System Audio Control function.	• Set [AUDIO (HDMI)] in [HDMI SETUP] to [ON] (page 51). • Make sure that the connected TV is compatible with the System Audio Control function. • For details, see "Using the Control for HDMI Function for "BRAVIA" Sync" (page 59).

USB device

Symptom	Remedy
"OVERLOAD," "REMOVE USB," then "PUSH POWER" appear in the front panel display.	• A problem has been detected with the level of electrical current from the ⇧ (USB) port. Turn off the system and remove the USB device from the ⇧ (USB) port. Make sure there is no problem with the USB device. If this display pattern persists, contact your nearest Sony dealer.
Are you using a supported USB device?	• If you connect an unsupported USB device, the following problems may occur. See "Playable USB Devices" (supplement) for the supported device types. – The USB device is not recognized. – File or folder names are not displayed on this system. – Playback is not possible. – The sound skips. – There is noise. – A distorted sound is output. – Transferring stops before it is finished.
There is no sound.	• The USB device is not connected correctly. Turn off the system, then reconnect the USB device.

Symptom	Remedy
The sound is distorted.	• The bit rate used when encoding the audio files was low. Transfer audio files encoded with higher bit rates onto the USB device.
There is noise or the sound skips.	• Turn off the system, then reconnect the USB device. • Noise may have entered during the transferring process. Delete the file, and try transferring again. • Copy the files to your computer, format the USB device in FAT12, FAT16, or FAT32 format, and transfer the files to the USB device again.* * This system supports FAT12, FAT16, and FAT32, but some USB devices may not support all of these. For details, refer to the operating instructions of each USB device or contact the manufacturer.
The USB device cannot be connected into the ⇇ (USB) port.	• The USB device is being connected backwards. Connect the USB device in the correct orientation.
The USB device which has been used on another device does not work.	• It may be recorded in an unsupported format. If so, first take the precaution of backing up important files on the USB device by copying them to your computer hard disk. Next, format the USB device in FAT12, FAT16, or FAT32 format, and transfer the files to the USB device again.* * This system supports FAT12, FAT16, and FAT32, but some USB devices may not support all of these. For details, refer to the operating instructions of each USB device or contact the manufacturer.
"READING" is displayed for a long time.	• The reading process can take a long time in the following cases. – There are many folders or files on the USB device. – The file structure is extremely complex. – The memory capacity is excessive. – The internal memory is fragmented. • Sony recommends following these guidelines. – Total folders on the USB device: 200 or less – Total files per folder: 150 or less
File names are not displayed properly.	• Transfer the music data onto the USB device again, as the data stored in the USB device may have been corrupted. • The character codes that can be displayed by this system are numbers and letters of the alphabet only. Other characters are not displayed correctly.
"DATA ERROR" appears in the front panel display during playback of a USB device.	• The audio file/JPEG image file/video file you want to play is broken. • The data is not MPEG1 Audio Layer 3 data. • The JPEG image file format does not conform to DCF. • The file has the extension ".jpg" or ".jpeg," but is not in JPEG format. • The file you want to play has the extension ".avi" or ".divx" but is not in DivX format, or is in DivX format but does not conform to DivX Certified profiles. • The file you want to play has the extension ".mp4" or ".m4v" but is not in MP4 format, or is in MP4 format but does not conform to MPEG4 Simple Profiles.
Playback does not start.	• Turn off the system, then reconnect the USB device. • Connect the USB device that this system can play. See "Playable USB Devices" (supplement). • Press ▷ to start play.
Playback does not start from the first track.	• Program Play, Shuffle Play, or Repeat Play has been selected. Press CLEAR to cancel these functions before playing a USB device. • Resume Play has been selected. During stop, press ■ on the unit or the remote and then start playback.
It takes time until playback starts.	• The system is playing an audio file in AAC format.

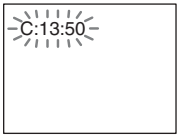
Symptom	Remedy
The USB device (audio file/ JPEG image file/video file) cannot be played back.	• USB devices formatted with file systems other than FAT12, FAT16, or FAT32 are unsupported.* • Files that are encrypted or protected by passwords, etc. cannot be played back. • The MP3 file does not have the extension ".mp3." • The WMA file does not have the extension ".wma." • The AAC file does not have the extension ".m4a." • The DivX video file does not have the extension ".avi" or ".divx." • The MPEG4 video file does not have the extension ".mp4" or ".m4v." • The data is not stored in the desired format. • The MP3 files in formats other than MPEG 1 Audio Layer 3 cannot be played back. • If you use a partitioned USB device, only audio files on the first partition can be played. • The system can playback to a depth of 8 folders only. • Check the [MEDIA] setting (page 67). • The number of folders has exceeded 200. • For audio files/JPEG image files/video files, the folder contains more than 150 files. • The JPEG image file does not have the extension ".jpg" or ".jpeg." • The JPEG image file is larger than 3,072 (width) × 2,048 (height) in normal mode, or more than 2,000,000 pixels in progressive JPEG mode which is mainly used on Internet Web sites. • JPEG image files with a high width to length ratio cannot be played back. • The system cannot play audio tracks in MP3PRO format. • A WMA file that is in WMA DRM, WMA Lossless, or WMA PRO format cannot be played back. • An AAC file that is in AAC DRM or AAC Lossless format cannot be played back. * This system supports FAT12, FAT16, and FAT32, but some USB devices may not support all of these. For details, refer to the operating instructions of each USB device or contact the manufacturer.
Audio files or JPEG image files take longer to play back than others.	• After the system reads all files on the USB device, playback may take more time than usual if: – the number of folders or files is very large. – the folder or file organization structure is very complex. – the memory capacity is very large. – the file size is extremely large. – the physical structure within the memory is fragmented. • Sony recommends following these guidelines. – Total folders on the USB device: 200 or less – Total files per folder: 150 or less
You cannot start transferring onto a USB device.	• The following problems may have occurred. – The USB device is full. – The number of audio files and folders on the USB device has reached the upper limit. – The USB device is write-protected.

Symptom	Remedy
Transferring stops before it is finished.	• The communication speed of the USB device is extremely slow. Connect a USB device that this system can play. • If the transferring and erasing operations are repeated multiple times, the file structure within the USB device becomes complex. Follow the procedure in the operating instructions of the USB device to format the USB device. If the problem persists, contact your nearest Sony dealer.
Transferring to a USB device results in an error.	• You are using an unsupported USB device. See “Playable USB Devices” (supplement). • The USB device was disconnected or the power was turned off during transferring. The USB device may be broken. Follow the procedure in the operating instructions of the USB device to format the USB device. If the problem persists, contact your nearest Sony dealer.
Audio files or folders on the USB device cannot be erased.	• Check if the USB device is write-protected. • The USB device was disconnected or the power was turned off during erasing. Delete the partially-erased file. If this does not fix the problem, the USB device may be broken. Follow the procedure in the operating instructions of the USB device to format the USB device. If the problem persists, contact your nearest Sony dealer.

Self-diagnosis Function

(When letters/numbers appear in the display)

When the self-diagnosis function is activated to prevent the system from malfunctioning, a 5-character service number (e.g., C 13 50) with a combination of a letter and 4 digits appears on the TV screen or front panel display. In this case, check the following table.



First 3 characters of the service number	Cause and/or corrective action
C 13	The disc is dirty. ➡Clean the disc with a soft cloth (page 90).
C 31	The disc is not inserted correctly. ➡Restart the system, then re-insert the disc correctly.
E XX (XX is a number)	To prevent a malfunction, the system has performed the self-diagnosis function. ➡Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10

When the version number appears on the TV screen

When you turn on the system, the version number [VER.X.XX] (X is a number) may appear on the TV screen. Although this is not a malfunction and for Sony service use only, normal system operation will not be possible. Turn off the system, and then turn on the system again to operate.

Specifications

Amplifier Section

Stereo mode (rated) 108 W + 108 W (at 3 ohms, 1 kHz, 1% THD)

Surround mode (reference) RMS output power
FL/FR/C/SL/SR*: 144 watts (per channel at 3 ohms, 1 kHz, 10% THD)
Subwoofer L/Subwoofer R*: 140 watts (at 3 ohms, 80 Hz, 10% THD)

* *Depending on the decoding mode settings and the source, there may be no sound output.*

Inputs (Analog)

TV (AUDIO IN) Sensitivity: 450/250 mV

SAT/CABLE (AUDIO IN) Sensitivity: 450/250 mV

AUDIO IN/MIC Sensitivity: AUDIO IN 250/125 mV/MIC 1 mV

Inputs (Digital)

TV (COAXIAL IN/OPTICAL IN)
Impedance: 75 ohms/-
Input Stream: Dolby Digital 5.1ch/DTS 5.1ch/ Linear PCM 2ch
(Sampling Frequency: less than 48 kHz)

Outputs (Analog)

Phones Accepts low- and high-impedance headphones.

Super Audio CD/DVD System

Laser Diode Properties Emission Duration: Continuous
Laser Output: Less than 44.6µW

* This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.

Signal format system

Mexican and Latin American models: NTSC

Other models: NTSC/PAL

USB Section

⇔ (USB) port:

Maximum current: 500 mA

Tuner Section

System PLL quartz-locked digital synthesizer

FM Tuner section

Tuning range

North American models: 87.5 MHz - 108.0 MHz (100 kHz step)

Other models: 87.5 MHz - 108.0 MHz (50 kHz step)

Antenna (aerial) FM wire antenna (aerial)

Antenna (aerial) terminals 75 ohms, unbalanced

Intermediate frequency 10.7 MHz

Video Section

Outputs VIDEO: 1 Vp-p 75 ohms
COMPONENT:
Y: 1 Vp-p 75 ohms
P_B/C_B, P_R/C_R: 0.7 Vp-p 75 ohms
HDMI OUT: Type A (19 pin)

Speakers

Front (SS-TS100)

Speaker system 2-Way 3-Driver, Bass reflex

Speaker unit Tweeter: 50 mm, cone type
Woofer: 80 mm, cone type × 2

Rated impedance 6 ohms

Dimensions (approx.) 120 mm × 330 mm × 215 mm (w/h/d)

Mass (approx.) 3.0 kg

Center (SS-CT91)

Speaker system Full range, Bass reflex, Magnetically Shielded

Speaker unit 65 mm, cone type

Rated impedance 3 ohms

Dimensions (approx.) 265 mm × 94 mm × 77 mm (w/h/d)

Mass (approx.) 0.7 kg

Surround (SS-TS101)

Speaker system 2-Way 3-Driver, Bass reflex

Speaker unit Tweeter: 50 mm, cone type
Woofer: 80 mm, cone type × 2

Rated impedance 3 ohms

Dimensions (approx.) 120 mm × 330 mm × 215 mm (w/h/d)

Mass (approx.) 3.0 kg

Subwoofer (SS-WS98)

Speaker system Subwoofer, Bass reflex

Speaker unit 200 mm, cone type

Rated impedance 3 ohms

Dimensions (approx.) 360 mm × 380 mm × 285 mm (w/h/d)

Mass (approx.) 7.5 kg

* With the front and surround speakers stacked on the supplied stand and base.

Dimensions (approx.) 370 mm × 1,200 mm × 370 mm (w/h/d)

Mass (approx.) 12 kg

General

Power requirements
North American and Mexican models: 120 V AC, 60 Hz
Taiwan models: 120 V AC, 50/60 Hz
Argentine models: 220 V - 240 V AC, 50/60 Hz
Latin American models: 110 V - 240 V AC, 50/60 Hz
Other models: 220 V - 240 V AC, 50/60 Hz
Power consumption On: 185 W
Standby: 0.3 W (at the Power Saving mode)
Output voltage (DIGITAL MEDIA PORT) DC 5 V
Output current (DIGITAL MEDIA PORT) 700 mA
Dimensions (approx.) 430 mm × 66 mm × 390 mm (w/h/d) incl. projecting parts
Mass (approx.) 4.3 kg

Supported file format

MP3 (MPEG 1 Audio Layer-3)

File Extension: mp3
Bitrate: 32 kbps - 320 kbps
Sampling frequencies: 32/44.1/48 kHz

WMA (USB device only)

File Extension: wma
Bitrate: 48 kbps - 192 kbps
Sampling frequencies: 44.1 kHz

AAC (USB device only)

File Extension: m4a
Bitrate: 48 kbps - 320 kbps
Sampling frequencies: 44.1 kHz

DivX

File Extension: avi/divx
Video codec: DivX video
Bitrate: 8 Mbps (MAX)
Frame rate: 30 fps
Resolution: 720 × 576
Audio codec: MP3

MPEG4

File format: MP4 File Format
File Extension: mp4/m4v
Video codec: MPEG4 Simple Profile (AVC is not compatible.)
Bitrate: 4 Mbps
Frame rate: 30 fps
Resolution: 720 × 576
Audio codec: AAC-LC (HE-AAC is not compatible.)
DRM: Not compatible

Design and specifications are subject to change without notice.

Glossary

DCS (Digital Cinema Sound)

In collaboration with Sony Pictures Entertainment, Sony measured the sound environment of their studios and integrated the data of the measurement with Sony DSP (Digital Signal Processor) technology to develop "Digital Cinema Sound." "Digital Cinema Sound" simulates in a home theater an ideal movie theater sound environment based on the preference of the movie director.

Digital Cinema Auto Calibration

Digital Cinema Auto Calibration was developed by Sony to automatically measure and adjust the speaker settings to your listening environment in a short period of time.

Dolby Digital

This movie theater sound format is more advanced than Dolby Surround Pro Logic. In this format, the surround speakers output stereo sound with an expanded frequency range, and a subwoofer channel for deep bass is independently provided. This format is also called "5.1" with the subwoofer channel designed as the 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately for superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

Dolby Pro Logic II

Dolby Pro Logic II creates five full-bandwidth output channels from 2 channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

■ Movie mode

The Movie mode is for use with stereo television shows and all programs encoded in Dolby Surround. The result is enhanced sound field directionality that approaches the quality of discrete 5.1-channel sound.

■ Music mode

The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space.

Dolby Surround Pro Logic

As one method of decoding Dolby Surround, Dolby Surround Pro Logic produces four channels from 2 channel sound. Compared with the former Dolby Surround system, Dolby Surround Pro Logic reproduces left-to-right panning more naturally and localizes sounds more precisely. To take full advantage of Dolby Surround Pro Logic, you should have one pair of surround speakers and a center speaker. The surround speakers output monaural sound.

DTS

Digital audio compression technology developed by DTS, Inc. This technology conforms to 5.1-channel surround. This format is comprised of a stereo rear channel and a discrete subwoofer channel. DTS provides the same 5.1 discrete channels of high quality digital audio. The good channel separation is realized due to the all channel data being recorded discretely and processed digitally.

Dual Stereo Subwoofer

Whereas a conventional subwoofer provides only a monaural signal in which the lower frequencies of the left and right signals are mixed together, a stereo subwoofer provides independent lower frequencies from each channel for a richer, lower ambience.

HDMI (High-Definition Multimedia Interface)

HDMI is an interface that supports both video and audio on a single digital connection, allowing you to enjoy high quality digital picture and sound. The HDMI specification supports HDCP (High-bandwidth Digital Content Protection), a copy protection technology that incorporates coding technology for digital video signals.

Interlace format (Interlaced scanning)

The interlace format is the NTSC standard method for displaying TV images at 30 frames per second. Each frame is scanned twice - alternately between the even numbered scanning

lines and then odd numbered scanning lines, at 60 times per second.

Parental Control

A function of the DVD to limit playback of the disc by the age of users according to the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.

Progressive format (sequential scanning)

In contrast to the interlace format, the progressive format can reproduce 50 - 60 frames per second by reproducing all scanning lines (525 lines for the NTSC system). The overall picture quality increases and still images, text and horizontal lines appear sharper. This format is compatible with the 525 or 625 progressive format.

S-Force PRO Front Surround

Sony's long-term involvement in surround technology (and the vast amounts of acoustic data accumulated as a result) has led to the development of all-new processing method and advanced DSP to handle this task effectively, which we call S-Force PRO Front Surround. Compared with previous front surround technologies, S-Force PRO Front Surround reproduces a more convincing sense of distance and space, resulting in a true surround sound experience without the need for rear speakers.

Super Audio CD

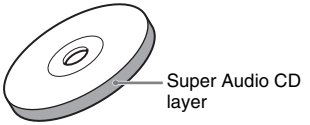
Super Audio CD is a new high-quality audio disc standard where music is recorded in the DSD (Direct Stream Digital) format (conventional CD is recorded in the PCM format). The DSD format, using a sampling frequency 64 times higher than that of a conventional CD, and with 1-bit quantization, achieves both a wide frequency range and a wide dynamic range across the audible frequency range, and so provides music reproduction extremely faithful to the original sound.

■ Super Audio CD types

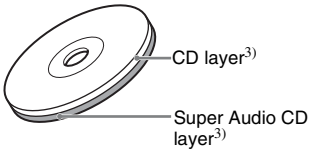
There are two types of discs, depending on the Super Audio CD layer and CD layer combination.

- Super Audio CD layer: A high-density signal layer for Super Audio CD
- CD layer[1)]: A layer that is readable by a conventional CD player

Single layer disc
(a disc with a single Super Audio CD layer)

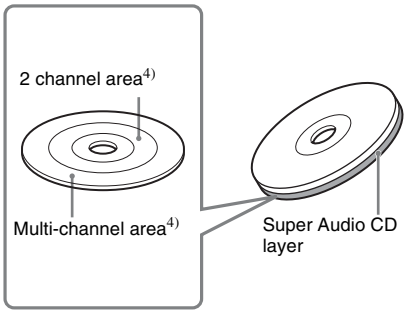


Hybrid disc[2)]
(a disc with a Super Audio CD layer and a CD layer)



A Super Audio CD layer consists of the 2 channel area or the multi-channel area.

- 2 channel area: An area in which 2 channel stereo tracks are recorded
- Multi-channel area: An area in which multi-channel (up to 5.1 channels) tracks are recorded



[1)]You can play the CD layer on a conventional CD player.

[2)]Since both layers are on one side, it is not necessary to turn the disc over.

[3)]To select a layer, see "Changing a playback layer for a hybrid Super Audio CD" (page 32).

[4)]To select an area, see "Selecting a playback area for a Super Audio CD" (page 32).

Playback priority of file types

The table below describes the playback priority of file types under the [MEDIA] setting.

File type on a disc or USB device	[MEDIA] setting				
	[VIDEO]		[MUSIC/ PHOTO]	[PHOTO]	[MUSIC]
	Disc	USB device	Disc	Disc/USB device	Disc/USB device
Video files only	Video files	Video files	Video files	Video files	Video files
JPEG image files only	JPEG image files	JPEG image files	JPEG image files	JPEG image files	JPEG image files
Audio files only	MP3 files	Audio files	MP3 files	Audio files*	Audio files*
Video files and JPEG image files	Video files	Video files	JPEG image files	JPEG image files	Video files
Video files and audio files	Video files	Video files	MP3 files	Audio files*	Audio files*
Audio files and JPEG image files	MP3 files and JPEG image files with slide show	Audio files	MP3 files and JPEG image files with slide show	JPEG image files	Audio files*
Video files, audio files, and JPEG image files	Video files	Video files	MP3 files and JPEG image files with slide show	JPEG image files	Audio files*

* When using a disc, you can play MP3 files only.

Language Code List

The language spellings conform to the ISO 639: 1988 (E/F) standard.

Code	Language	Code	Language	Code	Language	Code	Language
1027	Afar	1183	Irish	1347	Maori	1507	Samoan
1028	Abkhazian	1186	Scots Gaelic	1349	Macedonian	1508	Shona
1032	Afrikaans	1194	Galician	1350	Malayalam	1509	Somali
1039	Amharic	1196	Guarani	1352	Mongolian	1511	Albanian
1044	Arabic	1203	Gujarati	1353	Moldavian	1512	Serbian
1045	Assamese	1209	Hausa	1356	Marathi	1513	Siswati
1051	Aymara	1217	Hindi	1357	Malay	1514	Sesotho
1052	Azerbaijani	1226	Croatian	1358	Maltese	1515	Sundanese
1053	Bashkir	1229	Hungarian	1363	Burmese	1516	Swedish
1057	Byelorussian	1233	Armenian	1365	Nauru	1517	Swahili
1059	Bulgarian	1235	Interlingua	1369	Nepali	1521	Tamil
1060	Bihari	1239	Interlingue	1376	Dutch	1525	Telugu
1061	Bislama	1245	Inupiak	1379	Norwegian	1527	Tajik
1066	Bengali; Bangla	1248	Indonesian	1393	Occitan	1528	Thai
		1253	Icelandic	1403	(Afan)Oromo	1529	Tigrinya
1067	Tibetan	1254	Italian	1408	Oriya	1531	Turkmen
1070	Breton	1257	Hebrew	1417	Punjabi	1532	Tagalog
1079	Catalan	1261	Japanese	1428	Polish	1534	Setswana
1093	Corsican	1269	Yiddish	1435	Pashto; Pushto	1535	Tonga
1097	Czech	1283	Javanese			1538	Turkish
1103	Welsh	1287	Georgian	1436	Portuguese	1539	Tsonga
1105	Danish	1297	Kazakh	1463	Quechua	1540	Tatar
1109	German	1298	Greenlandic	1481	Rhaeto-Romance	1543	Twi
1130	Bhutani	1299	Cambodian			1557	Ukrainian
1142	Greek	1300	Kannada	1482	Kirundi	1564	Urdu
1144	English	1301	Korean	1483	Romanian	1572	Uzbek
1145	Esperanto	1305	Kashmiri	1489	Russian	1581	Vietnamese
1149	Spanish	1307	Kurdish	1491	Kinyarwanda	1587	Volapük
1150	Estonian	1311	Kirghiz	1495	Sanskrit	1613	Wolof
1151	Basque	1313	Latin	1498	Sindhi	1632	Xhosa
1157	Persian	1326	Lingala	1501	Sangho	1665	Yoruba
1165	Finnish	1327	Laothian	1502	Serbo-Croatian	1684	Chinese
1166	Fiji	1332	Lithuanian			1697	Zulu
1171	Faroese	1334	Latvian; Lettish	1503	Singhalese		
1174	French			1505	Slovak		
1181	Frisian	1345	Malagasy	1506	Slovenian	1703	Not specified

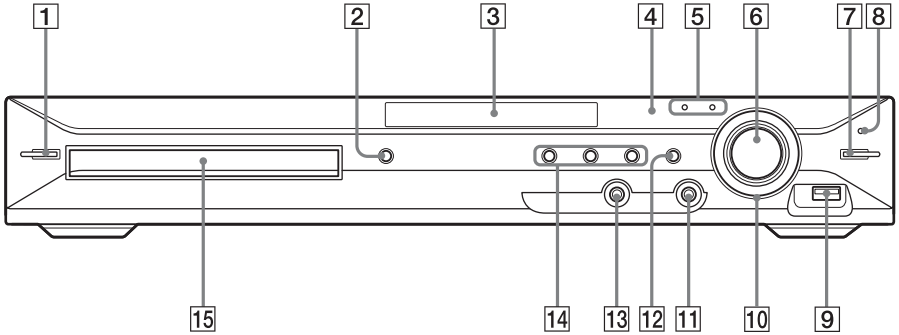
Parental Control Area Code List

Code	Area	Code	Area	Code	Area	Code	Area
2044	Argentina	2165	Finland	2362	Mexico	2149	Spain
2047	Australia	2174	France	2376	Netherlands	2499	Sweden
2046	Austria	2109	Germany	2390	New Zealand	2086	Switzerland
2057	Belgium	2248	India	2379	Norway	2528	Thailand
2070	Brazil	2238	Indonesia	2427	Pakistan	2184	United Kingdom
2079	Canada	2254	Italy	2424	Philippines		
2090	Chile	2276	Japan	2436	Portugal		
2092	China	2304	Korea	2489	Russia		
2115	Denmark	2363	Malaysia	2501	Singapore		

Index to Parts and Control

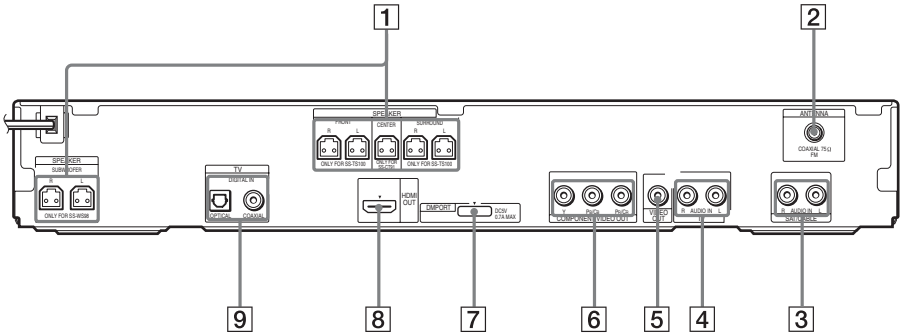
For more information, refer to the pages indicated in parentheses.

Front panel



1 **I/⏻ (on/standby) (22, 88)**
2 **⏏ (open/close) (29)**
3 **Front panel display (109)**
4 **(remote sensor) (9)**
5 **MOVIE/MUSIC indicator (83)**
6 **VOLUME control (29)**
7 **REC TO USB (71)**
8 **REC TO USB indicator (71)**
9 **(USB) port (62)**
10 **OPERATION DIAL (29)**
11 **PHONES jack (29)**
12 **FUNCTION (25)**
13 **AUDIO IN/MIC/A.CAL MIC jack (18, 22, 76, 78)**
14 **Play operation buttons (29)**
15 **Disc tray (29)**

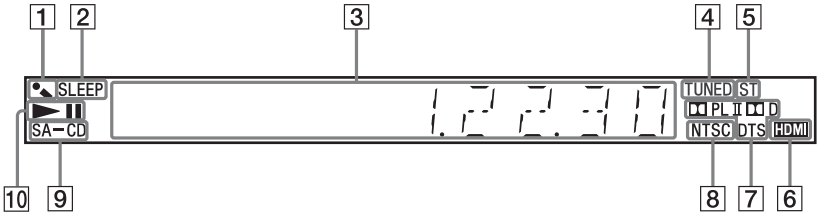
Rear panel



1 **SPEAKER jacks (13)**
2 **COAXIAL 75Ω FM jack (20)**
3 **SAT/CABLE (AUDIO IN R/L) jacks (18)**
4 **TV (AUDIO IN R/L) jacks (17)**
5 **VIDEO OUT jack (15)**
6 **COMPONENT VIDEO OUT jacks (15)**
7 **DMPORT (DIGITAL MEDIA PORT) jack (18, 74)**
8 **HDMI OUT jack (15)**
9 **TV (DIGITAL IN COAXIAL/OPTICAL) jacks (17)**

Front panel display

About the indications in the front panel display



1 **Lights up when the karaoke mode is on. (78)**

2 **Flashes when the sleep timer is set. (84)**

3 **Displays the system's status such as chapter, title, or track number, time information, radio frequency, playing status, decoding mode, etc.**

4 **Lights up when a station is received. (Radio only) (56)**

5 **Stereo/Monaural effect (Radio only) (57)**

6 **Lights up when the HDMI OUT jack is correctly connected to HDCP (High-bandwidth Digital Content Protection) compliant device with HDMI or DVI (Digital Visual Interface) input. (15)**

7 **Current surround format (Except for JPEG image file)**

8 **Lights up when the color system is set to NTSC. (Asian, Australian, Middle Eastern, and South African models only)**

9 **Lights up when a Super Audio CD/CD is loaded. (32)**

10 **Playing status**

Remote control

ALPHABETICAL ORDER

A – M

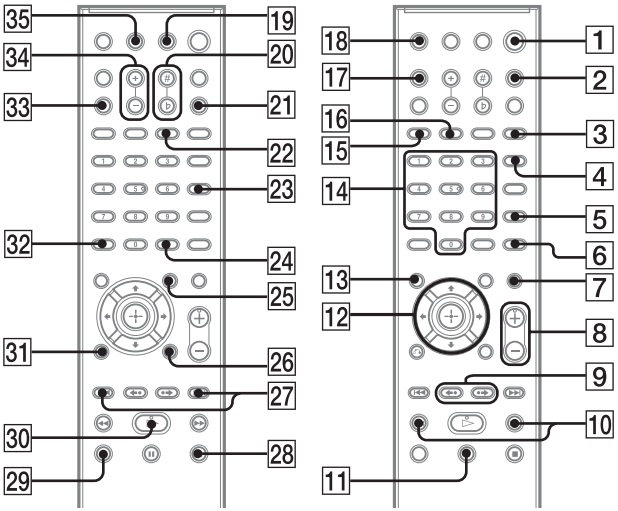
ANGLE 22 (31)
AUDIO 15 (31)
CLEAR 32 (34, 57)
D.TUNING 16 (57)
DISPLAY 3 (58, 68, 85)
DVD MENU 25 (37)
DVD TOP MENU 13 (37)
DYNAMIC BASS 23 (82)
ECHO 33 (78)
ENTER 24 (77)
FUNCTION 2 (25, 29)
INPUT 15 (77)
KARAOKE PON 21 (80)
KEYCON #/♭ 20 (79)
MEMORY SELECT[1] 22
MENU 25 (77)
MIC VOL +/– 34 (78)
MUTING 7 (29)

N – Z

NIGHT 5 (82)
ONE-TOUCH PLAY 35 (60)
PICTURE NAVI 6 (40, 64)
PRESET +/– 27 (57)
PROG +/– 27 (77)
SCORE 17 (81)
SOUND MODE 4 (83)
SUBTITLE 16 (31)
SYSTEM MENU 24 (21, 26, 56, 84)
THEATRE 18 (59)
TOOLS 26 (77)
TUNING +/– 10 (56)
TV 29 (77)
VOLUME +/– 8 (29)

BUTTON DESCRIPTIONS

Number buttons 14 (33, 56, 77)
I/⏻ (on/standby) 1 (21, 22, 29)
TV I/⏻ (on/standby) 19 (77)
←/↑/↓/→/⊕ 12 (21, 22, 32, 34, 56, 75)
←•/•→ REPLAY/ADVANCE 9 (29)
I◄◄/►►I 27 (29)
◄◄/►► 10 (29)
STEP ◄II/II► 9 (29)
SLOW ◄I/I► 10 (29)
▷ (play) 30 (29)
■ (stop) 28 (29)
II (pause) 11 (29)
▭ DISPLAY[2] 26 (22, 32, 34, 47, 75, 111)
↶ RETURN 31 (33, 77)
-/-- 32 (77)

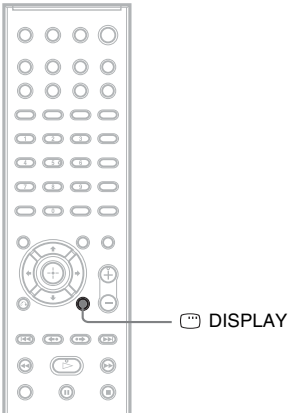


[1] See the included supplement.

[2] This button is available for the "DVD," "USB," or "DMPORT" function. Depending on the DIGITAL MEDIA PORT adapter, this button may not work.

Guide to the Control Menu Display

You can use the Control Menu display to select a function and to view related information.



Press DISPLAY repeatedly.

Each time you press DISPLAY, the Control Menu display changes:
① → ② → ... → ① → ...

① Control Menu display 1
② Control Menu display 2 (appears when available)
③ Control Menu display off

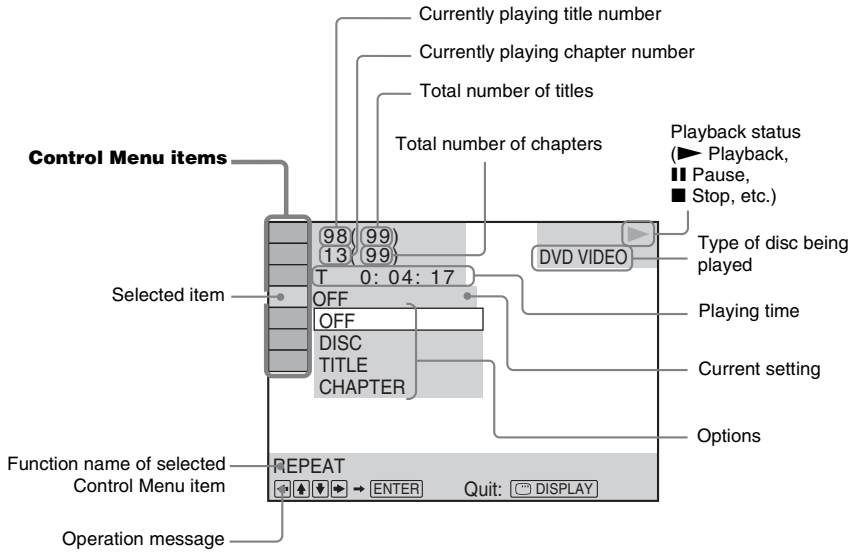
Note

• The Control Menu Display appears during the “DVD” or “USB” function.

Control Menu display

The Control Menu display 1 and 2 will show different items depending on the disc type. For details, see the pages in parentheses.

Example: Control Menu display 1 when playing a DVD VIDEO.



To turn off the display

Press DISPLAY.

List of Control Menu items

Item	Item Name, Function, Relevant Disc Type
	[TITLE] (page 37)/[SCENE] (page 37)/[TRACK] (page 37) You can select the title, scene, or track to be played. DVD-V DVD-VR VIDEO CD
	[CHAPTER] (page 37)/[INDEX] (page 37) You can select the chapter or index to be played. DVD-V DVD-VR VIDEO CD
	[INDEX] (page 37) You can display the index and select the index to be played. SACD
	[TRACK] (page 37) You can select the track to be played. CD DATA-CD DATA DVD SACD
	[ORIGINAL/PLAY LIST] (page 37) You can select the type of titles (DVD-RW/DVD-R) to be played, the [ORIGINAL] one, or an edited [PLAY LIST]. DVD-VR
	[TIME] (page 38) You can check the elapsed time and the remaining playback time. You can play from a desired point by inputting the time code (DVD VIDEO/DVD-VR only). DVD-V DVD-VR VIDEO CD CD DATA-CD DATA DVD SACD
CH	**[MULTI/2CH] (page 32)** You can select the playback area on a Super Audio CD when available. SACD
	[SUPER AUDIO CD/CD LAYER] (page 32) You can select the playback layer on a Super Audio CD when available. SACD
	[PROGRAM] (page 34) You can select the track to play in the order you want. VIDEO CD CD

	[SHUFFLE] (page 35) You can play the tracks/files in random order. VIDEO CD CD DATA-CD DATA DVD SuperAudioCD
	[REPEAT] (page 36) You can play the entire disc (all titles/all tracks/all folders/all files) repeatedly or one title/chapter/track/folder/file repeatedly. DVD-V DVD-VR VIDEO CD CD DATA-CD DATA DVD SuperAudioCD
	[A/V SYNC] (page 45) You can adjust the delay between the picture and sound. DVD-V DVD-VR VIDEO CD DATA-CD DATA DVD
	[DISC MENU] (page 37) You can display the DVD's menu. DVD-V
	[BROWSING] (page 42) You can display the list of folders/JPEG image files. DATA-CD DATA DVD
	[SETUP] (page 47) [CUSTOM] In addition to the Quick Setup setting, you can adjust various other settings. [QUICK] (page 22) You can make the basic adjustments. Use Quick Setup to select the desired language of the on-screen display, the aspect ratio of the TV, and select yes or no to start the Auto Calibration. DVD-V DVD-VR VIDEO CD CD DATA-CD DATA DVD SuperAudioCD
	[FOLDER] (page 37) You can select the folder to be played. DATA-CD DATA DVD
	[FILE] (page 37) You can select the JPEG image file or video file to be played. DATA-CD DATA DVD
*	**[DATE] (page 87)** You can display the date the picture was taken by a digital camera. DATA-CD DATA DVD
*	**[INTERVAL] (page 41)** You can select the duration for which the slides are displayed on the TV screen. DATA-CD DATA DVD
*	**[EFFECT] (page 42)** You can select the effects to be used for changing slides during a slide show. DATA-CD DATA DVD
	[MEDIA] (page 42) You can select the data type (MP3 file, JPEG image file, video file, or both MP3 file and JPEG image file) to be played on a DATA CD/DATA DVD. DATA-CD DATA DVD

* These items are not displayed when playing a DATA CD/DATA DVD with video files.

List of Control Menu Items for USB device

Item	Item Name, Function, Relevant Disc Type
	[REPEAT] (page 67) You can play the entire USB device (all folders/all files) repeatedly or one folder/file repeatedly.
	[BROWSING] (page 67) You can display the list of folders/JPEG image files.
	[DATE] (page 69) You can display the date the picture was taken by a digital camera.
	[INTERVAL] (page 65) You can select the duration for which the slides are displayed on the TV screen.

	[EFFECT] (page 65) You can select the effects to be used for changing slides during a slide show.
	[MEDIA] (page 67) You can select the data type (MP3/AAC/WMA file, JPEG image file, or video file) on a USB device.
	[USB TRANSFER] (page 70) You can transfer tracks on an audio CD or MP3 files on a CD/DATA CD/DATA DVD onto a USB device.
	[SHUFFLE] You can play files in random order.
	[TRACK] You can select the track to be played.
	[FOLDER] You can select the folder to be played.
	[FILE] You can select the JPEG image file to be played.
	[TIME] You can check the elapsed time and the remaining playback time.
	[A/V SYNC] You can adjust the delay between the picture and sound.

List of Control Menu Items for karaoke

Item	Item Name, Function, Relevant Disc Type
	[KARAOKE MODE] (page 78) Set karaoke mode to on and off. DVD-V DVD-VR VIDEO CD CD DATA-CD DATA DVD
	[SCORE MODE] (page 81) Calculates your vocal score by comparing your voice with the music source. DVD-V DVD-VR VIDEO CD CD DATA-CD DATA DVD
	[VOCAL SELECT] (page 80) Selects different kind of vocals recorded in the disc. DVD-V VIDEO CD CD

Tip

• The Control Menu icon indicator lights up in yellow → when you select any item except [OFF] ([PROGRAM], [SHUFFLE], [REPEAT], [A/V SYNC], [KARAOKE MODE], and [VOCAL SELECT] only). The [ORIGINAL/PLAY LIST] indicator lights up in yellow when you select [PLAY LIST] (default setting). The [MULTI/2CH] indicator lights up in yellow when you select the multi-channel playback area on a Super Audio CD.

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